

Section 4.0

Plant & Operations Description

NPDES PERMIT RENEWAL APPLICATION
NPDES NO. CA0001171
Facility Operation Description
for the Long Beach Generation LLC,
Long Beach Generating Station, Los Angeles County

1.0 Facility Description

The Long Beach Generating Station (LBGS) is located at 2665 West Seaside Boulevard in the City of Long Beach, California, adjacent to Long Beach Harbor.

Long Beach Generation LLC is the current owner of LBGS and has owned the facility since April 1998. The power plant was previously owned and operated by Southern California Edison (SCE).

LBGS consists of seven (7) gas turbine generating units (Units 1-7) and two (2) steam electric generating units (Units 8 and 9) with a total design capacity of 577 megawatts. LBGS discharges up to 265 million gallons per day (MGD) of wastes consisting of once-through cooling water and low volume wastes into the Back Channel in Long Beach Harbor, a water of the United States. The power generation operation of the LBGS was permanently retired effective January 1, 2005, including the shutdown of all nine generating units. A notice of plant shutdown was submitted to the Los Angeles Regional Water Quality Control Board on January 7, 2005.

This permit application presents the values, parameters, and characteristics for the existing discharge at LBGS. This permit will also request significant changes to the operations description at the LBGS, and characteristic of the discharge. LBGS is requesting permission to stop operations of the once through cooling water system permanently as it serves no function to the facility. Discharge from the LBGS will henceforth only require discharge of the low volume waste stream.

LBGS wastes are discharged through a channel bank outfall structure at Berth 114, Discharge Serial Nos. 001, described as follows:

- | | | |
|----|---------------------------|-------------------------|
| a. | Discharge Serial No. 001: | Latitude: 33° 45' 53" |
| | (Units 1 and 2) | Longitude: 118° 13' 17" |

Discharge Serial No. 001 consists of one channel bank outfall which discharges in the Port of long Beach Back Channel.

The cooling water intake structure is located northeast of the LBGS at the west bank of Back Channel and draws water from an opening which is between 12 and 42 feet below the surface of the water.

Intermittently, biological growth in each of the condenser tubes is controlled by injection of chlorine (in the form of sodium hypochlorite) into the cooling water stream for a maximum of two hours per generating unit per day.

Groundwater system wastes are collected and flow through a floatation type oil/water separator before being discharged into the retention basin. The oil recovery system processes oily wastes skimmed from the retention basin. Low volume wastes from the LBGS flow into the retention basin and are then discharged along with the once-through cooling water to the Long Beach Harbor through the same outfall point (Discharge Serial No. 001). However, during maintenance of the retention basin or the once-through cooling system, low volume wastes are discharged directly to the Long Beach Harbor through the same outfall point. Residues in the basin are periodically hauled away to a legal disposal site. Figure 1 shows the location map of the LBGS.

A water flow diagram (Figure 4) is provided as "Schematic Diagram of Water Flow" in Section 3.0 with EPA Form 2C. Figure 4 shows maximum flow rate of each waste stream for the existing operations. Include in this section is Figure 5 "New Schematic Diagram of Water Flow – Direct Discharge of Low Volume Waste Streams", which reflects the water flow characteristics if the requested changes discussed in the flowing section are implemented.

2.0 Discharge Description

LBGS has the following wastewater discharges to the ocean:

- a. Once-Through (Non-contact) Cooling Water
- b. Low Volume Wastes

The wastewater discharge flow summary of the LBGS is provided in Table 2 below:

TABLE 2
Outfall and Nature of Wastes Discharged

Discharge Serial No.		001
Once-through Cooling System, and Low Volume Wastewaters		
Diameter		10-foot
Outfall Structure		Channel Bank Outfall
Latitude		33° 45' 53"
Longitude		118° 13' 17"
Maximum Temperature, (°F)	Winter (October to April 2004)	88
	Summer (May to September 2004)	96
Waste Streams (maximum volume, MGD)	Once-through Cooling Water	261.00 MGD
	Low Volume Wastes ⁽¹⁾ :	
	• Yard Drain	1.2 MGD
	• Plant Drains	0.07 MGD
	• Plant No. 2 Well Point System	1.44 MGD
	• Tank Farm Well Point System	0.504 MGD
	• Oil Recovery System	0.156 MGD

MGD = Million Gallons a Day

3.0 Section 316(b) of the Clean Water Act

Section 316(b) of the Federal Clean Water Act (Clean Water Act) requires that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impacts for facilities which generate electricity and utilize once through cooling water systems with circulating capacity of 50 million gallons per day or greater.

On July 9, 2004, the U.S. Environmental Protection Agency (USEPA) published its final rule prescribing how "existing facilities" may comply with Section 316(b) of the Clean Water Act. 69 Fed. Reg. 41575, 41683 (July 9, 2004). Existing facilities, by rule definition, include "as its primary activity, the facility both generates and transmits electric power, or generates electric power but sells it to another entity for transmission..." (40 CFR 125.91), among other applicability criteria

LBGS permanently retired the existing electric power generation equipment at the facility effective January 1, 2005, and as such, is not a "Phase II existing facility" within the meaning of 40 CFR 125.91.

Historical NPDES Monitoring Data Summary

***Long Beach Generating Station
NPDES Monitoring Data
2001***

Long Beach Generating Station
NPDES Monitoring Summary 2001

Long Beach Generation LLC
Long Beach Generating Station
2001

Discharge No. 001	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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Effluent

pH (Max)	8.1	8.2	8.1	8.0	8.2	8.1	8.0	7.9	8.0	8.0	7.9	8.0
pH (Min)	7.9	8.0	7.6	7.9	7.9	8.0	7.9	7.6	7.8	7.8	7.8	7.9
Flow (Max) MGD	193.6	190.8	63.5417	214	208.5	181.5	183.1	202.2	146.6	132.3	104.5	132.1
Flow (Avg) MGD	143.13	133.89	63.5417	143.86	147.86	111.49	131.66	122.88	123.23	103.29	65.667	92.13

Circ. Water Discharge

Temp (Max) °F	72	68	72	81	77	79	75	73	73	73	77	63
Temp (Min) °F	64	63	63	70	68	72	66	66	70	66	64	59
Heat Treat Temp °F												

Chlorine

Total - Avg (mg/l)	0.07	0.12	0.05	0.10	0.12	0.10	0.14	0.11	0.15	0.08	0.05	0.09
Total - Max (mg/l)	0.08	0.18	0.08	0.19	0.16	0.19	0.19	0.17	0.17	0.14	0.06	0.17
Total - Min (mg/l)	0.00	0.00	0.00	0.00	0.00	0.03	0.08	0.05	0.14	0.04	0.04	0.05
Free - Avg (mg/l)				0.11	0.11	0.08	0.14	0.11	0.14	0.07	0.04	0.08
Free - Max (mg/l)				0.20	0.15	0.17	0.19	0.16	0.15	0.11	0.05	0.16
Free - Min (mg/l)				0.00	0.00	0.03	0.08	0.05	0.12	0.04	0.03	0.04

Long Beach Generation LLC
Long Beach Generating Station
2001

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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Low Volume Waste

pH (Max)	9.7	8.9	9.1	8.3	8.5	9.5	8.1	8.0	7.4	7.9	7.9	8.0
pH (Min)	7.9	8.9	7.7	8.3	8.5	8.7	8.1	8.0	7.4	7.9	7.9	8.0
Total Suspended Solids - Max (mg/l)	25.0	21.7	14.1	10.8	7.4	17.2	3.4	7.4	11.8	9.5	11.7	5.9
Total Suspended Solids - Avg (mg/l)	10.9	20.0	7.3	10.2	7.1	11.0	3.3	7.1	11.2	9.4	11.5	5.7
Oil & Grease-Max (mg/l)	4.3	0.0	13.8	0.0	0.0	2.7	4.7	2.0	3.0	ND	1.4	2.5
Oil & Grease-Min (mg/l)	3.3	0.0	0.0	0.0	0.0	1.2	3.1	0.9	2.0	ND	1.1	ND
Flow Rate (MGD)	2.800	4.086	4.662	1.836	2.880	2.880	1.764	1.296	1.872	1.044	1.260	1.890

Long Beach Generation LLC
Long Beach Generating Station
2001

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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Oil Recovery System

Flow Rate (MGD)	0.000	0.000	0.000	0.000	0.000	0.000					0.163	
Total Suspended Solids - Max (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0					13.1	
Total Suspended Solids - Avg (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0					13.1	
Settleable Solids-Max (ml/l)	0.0	0.0	0.0	0.0	0.0	0.0					0.1	
Settleable Solids-Avg (ml/l)	0.0	0.0	0.0	0.0	0.0	0.0					0.1	
B.O.D. - Max (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0					0.1	
B.O.D. - Min (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0					0.1	
Oil & Grease-Max (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0					ND	
Oil & Grease-Min (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0					ND	
Surfactants (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0					0.2	
Phenolics, Total (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0					ND	
Arsenic, Total (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0					ND	
Cadmium, Total (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0					ND	
Chromium Hexavalent (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0					ND	
Lead, Total (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0					ND	
pH (Max)	0.0	0.0	0.0	0.0	0.0	0.0					7.5	
pH (Min)	0.0	0.0	0.0	0.0	0.0	0.0					7.5	

C) PRIORITY POLLUTANTS	Intake	
	1st Half	2nd half
Arsenic	0	1.151
Cadmium	0.001	0.0025
Chromium, Total	0.02	1.035
Chromium, Hexavalent	0	0
Copper	1.6025	1.34
Lead	0	0.0725
Mercury	0	0.0495
Nickel	0	0.3095
Selenium	0	3.27
Silver	0	0.102
Zinc	0	8.405

Outfall	
1st Half	2nd half
0	1.39
0	0.0025
0	0.9703
0	0.015
5.3575	1.8175
0	0.1928
0	0.0495
0	0.471
0	3.455
0	0.102
0	10.208

Long Beach Generating Station NPDES Monitoring Data 2001

C) WELLPOINT SYSTEM

Constituent	Maximum Concentration	Units	Date	Method
	March			
pH	7.7	pH	03/08/2001	EPA 150.1
Salinity	25	ppt	03/08/2001	SM 210, 15th
Suspended Solids	12.4	mg/L	03/08/2001	SM 2540 D
Disolved Solids	25,640	mg/L	03/08/2001	SM 2540 C
Oil & Grease	12.7	mg/L	03/08/2001	EPA 1664
BOD	0.0	mg/L	03/06/2001	EPA 405.1
Total Cyanide	0.0	mg/L	03/06/2001	EPA 355.5
Total Phenolics	0.0	mg/L	03/06/2001	EPA 420.1
Surfactants	0.0	mg/L	03/06/2001	EPA 425.1
Arsenic	0.0	mg/L	03/12/2001	EPA 6010B
Cadmium	0.0	mg/L	03/12/2001	EPA 6010B
Chromium Hexavalent	0.0	mg/L	03/06/2001	EPA 7196A
Copper	0.0	mg/L	03/12/2001	EPA 6010B
Mercury	0.0	mg/L	03/12/2001	EPA 7470A
Nickel	0.0	mg/L	03/12/2001	EPA 6010B
Selenium	0.0	mg/L	03/12/2001	EPA 6010B
Silver	0.0	mg/L	03/12/2001	EPA 6010B
Zinc	48.8	mg/L	03/12/2001	EPA 6010B
Pesticides/PCBs	0.0	mg/L	03/06/2001	EPA 8081/8082
VOCs,acrolein,etc	0.0	mg/L	03/06/2001	EPA8260B
Semi Volatile Organics	0.0	mg/L	03/12/2001	EPA 8270C

Well Point System Priority Pollutants					
Constituent & Date of Sample	Concentration	Units		Method	
Antimony	0.0	mg/l	03/12/2001	EPA 6010B	
Beryllium	0.0	mg/l	03/12/2001	EPA 6010B	
Chromium (Total)	0.0	mg/l	03/12/2001	EPA 6010B	
Lead	0.0	mg/l	03/12/2001	EPA 6010B	
Thallium	0.0	mg/L	03/12/2001	EPA 6010B	
Zinc	0.155	mg/l	03/12/2001	EPA 6010B	
Alpha-BHC3/12/01	0.0	ug/l	03/12/2001	EPA 8081/8022	
Gamma-BHC	0.0	ug/l	03/12/2001	EPA 8081/8022	
Beta-BHC	0.0	ug/l	03/12/2001	EPA 8081/8022	
Heptachlor	0.0	ug/l	03/12/2001	EPA 8081/8022	
Delta-BHC	0.0	ug/l	03/12/2001	EPA 8081/8022	
Aldrin	0.0	ug/l	03/12/2001	EPA 8081/8022	
Heptachlor Epoxide	0.0	ug/l	03/12/2001	EPA 8081/8022	
Endosulfan I	0.0	ug/l	03/12/2001	EPA 8081/8022	
Dieldrin	0.0	ug/l	03/12/2001	EPA 3529B	
4,4'-DDE	0.0	ug/l	03/12/2001	EPA 3529B	
Endrin	0.0	ug/l	03/12/2001	EPA 3529B	
Endrin Aldehyde	0.0	ug/l	03/12/2001	EPA 3529B	
4,4'-DDD	0.0	ug/l	03/12/2001	EPA 3529B	
Endosulfan II	0.0	ug/l	03/12/2001	EPA 3529B	
4,4'-DDT	0.0	ug/l	03/12/2001	EPA 3529B	
Endosulfan Sulfate	0.0	ug/l	03/12/2001	EPA 3529B	
Methoxychlor	0.0	ug/l	03/12/2001	EPA 3529B	

Chlordane	0.0	ug/l	03/12/2001	EPA 3529B	
Toxaphene	0.0	ug/l	03/12/2001	EPA 3529B	
Aroclor-1016	0.0	ug/l	03/12/2001	EPA 3529B	
Aroclor-1221	0.0	ug/l	03/12/2001	EPA 3529B	
Aroclor-1232	0.0	ug/l	03/12/2001	EPA 3529B	
Aroclor-1242-312/01	0.0	ug/l	03/12/2001	EPA 3529B	
Aroclor 1248	0.0	ug/l	03/12/2001	EPA 3529B	
Aroclor 1254	0.0	ug/l	03/12/2001	EPA 3529B	
Aroclor-1260	0.0	ug/l	03/12/2001	EPA 3529B	
Aroclor-1262	0.0	ug/l	03/12/2001	EPA 3529B	
Endrin Ketone	0.0	ug/l	03/12/2001	EPA 3520	
Acetone	0.0	ug/l	03/12/2001	EPA 3520	
Acrolein	0.0	ug/l	03/12/2001	EPA 3520	
Acrylonitrile	0.0	ug/l	03/12/2001	EPA 3520	
Benzene	0.0	ug/l	03/12/2001	EPA 3520	
Bromobenzene	0.0	ug/l	03/12/2001	EPA 3520	
Toxaphene	0.0	ug/l	03/12/2001	EPA 3520	
Bromochloromethane	0.0	ug/l	03/12/2001	EPA 3520	
Bromodichloromethane	0.0	ug/l	03/12/2001	EPA 3520	
Bromoform	0.0	ug/l	03/12/2001	EPA 3520	
Bromomethane-1242	0.0	ug/l	03/12/2001	EPA 3520	
2-Butanone	0.0	ug/l	03/12/2001	EPA 3520	
n-Butylbenzene	0.0	ug/l	03/12/2001	EPA 3520	
sec-Butylbenzene	0.0	ug/l	03/12/2001	EPA 3520	
tert-Butylbenzene	0.0	ug/l	03/12/2001	EPA 3520	
Carbon disulfide	0.0	ug/l	03/12/2001	EPA 3520	
Carbon Tetrachloride	0.0	ug/l	03/12/2001	EPA 3520	
Chlorobenzene	0.0	ug/l	03/12/2001	EPA 3520	
Chlorethane	0.0	ug/l	03/12/2001	EPA 3520	
2-Chloroethyl Vinyl Ether	0.0	ug/l	03/12/2001	EPA 3520	
Chloroform	0.0	ug/l	03/12/2001	EPA 3520	
Chlormethane	0.0	ug/l	03/12/2001	EPA 3520	
2-Chlorotoluene	0.0	ug/l	03/12/2001	EPA 3520	
4-Chlorotoluene	0.0	ug/l	03/12/2001	EPA 3520	
Dibromochloromethane	0.0	ug/l	03/12/2001	EPA 3520	
1,2-Dibromo-3-Chloropropane	0.0	ug/l	03/12/2001	EPA 3520	
1,2-Dibromoethane	0.0	ug/l	03/12/2001	EPA 3520	
Dibromomethane	0.0	ug/l	03/12/2001	EPA 3520	
1,2-Dichlorobenzene-1242	0.0	ug/l	03/12/2001	EPA 3520	
1,3-Dichlorobenzene	0.0	ug/l	03/12/2001	EPA 3520	
1,4-Dichlorobenzene	0.0	ug/l	03/12/2001	EPA 3520	
Dichlorodifluoromethane	0.0	ug/l	03/12/2001	EPA 3520	
1,1-Dichloroethane	0.0	ug/l	03/12/2001	EPA 3520	
1,3-Dichloropropene	0.0	ug/L	03/12/2001	EPA 3520	
1,2-Dichloroethane	0.0	ug/l	03/12/2001	EPA 3520	
1,1_Dichloroethane	0.0	ug/l	03/12/2001	EPA 3520	
c-1,2-Dichloroethane3/12/01	0.0	ug/l	03/12/2001	EPA 3520	
t-1,2-Dichloroethene	0.0	ug/l	03/12/2001	EPA 3520	
1,2-Dichloropropane	0.0	ug/l	03/12/2001	EPA 3520	
2,2-Dichloropropane	0.0	ug/l	03/12/2001	EPA 3520	
1,1-Dichloropropene	0.0	ug/l	03/12/2001	EPA 3520	
c-1,3-Dichloropropene	0.0	ug/l	03/12/2001	EPA 3520	
t-1,3-Dichloropropene	0.0	ug/l	03/12/2001	EPA 3520	
Ethylbenzene	0.0	ug/l	03/12/2001	EPA 3520	
2-Hexanone	0.0	ug/l	03/12/2001	EPA 3520	

Isopropylbenzene	0.0	ug/l	03/12/2001	EPA 3520	
p-Isopropyltoluene	0.0	ug/l	03/12/2001	EPA 3520	
Methylene chloride	0.0	ug/l	03/12/2001	EPA 3520	
4-Methyl-2-Pentanone	0.0	ug/l	03/12/2001	EPA 3520	
Napthalene	0.0	ug/l	03/12/2001	EPA 3520	
n-Propylbenzene	0.0	ug/l	03/12/2001	EPA 3520	
Styrene	0.0	ug/l	03/12/2001	EPA 3520	
1,1,1,2-Tetrachloroethane	0.0	ug/l	03/12/2001	EPA 3520	
1,1,2,2-Tetrachloroethane	0.0	ug/l	03/12/2001	EPA 3520	
Tetrachloroethane	0.0	ug/l	03/12/2001	EPA 3520	
Toulene	0.0	ug/l	03/12/2001	EPA 3520	
1,2,3-Trichlorobenzene	0.0	ug/l	03/12/2001	EPA 3520	
1,2,4-Trichlorobenzene	0.0	ug/l	03/12/2001	EPA 3520	
1,1,1-Trichloroethane	0.0	ug/l	03/12/2001	EPA 3520	
1,1,2-Trichloroethane	0.0	ug/l	03/12/2001	EPA 3520	
Trichloroethene	0.0	ug/l	03/12/2001	EPA 3520	
Trichlorofluoromethane	0.0	ug/l	03/12/2001	EPA 3520	
1,2,3-Trichloropropane	0.0	ug/l	03/12/2001	EPA 3520	
1,2,4-Trimethylbenzene	0.0	ug/l	03/12/2001	EPA 3520	
Vinyl Acetate	0.0	ug/l	03/12/2001	EPA 3520	
Vinyl Chloride	0.0	ug/l	03/12/2001	EPA 3520	
p/m-Xylene	0.0	ug/l	03/12/2001	EPA 3520	
o-Xylene	0.0	ug/l	03/12/2001	EPA 3520	
Methyl-tert-Butyl Ether	0.0	ug/l	03/12/2001	EPA 3520	
N-Nitrosodimethylamine	0.0	ug/l	03/12/2001	EPA 3520	
Aniline	0.0	ug/l	03/12/2001	EPA 3520	
Phenol	0.0	ug/l	03/12/2001	EPA 3520	
Bis(2-Chloroethyl) Ether	0.0	ug/l	03/12/2001	EPA 3520	
2-Chlorophenol	0.0	ug/l	03/12/2001	EPA 3520	
1,3-Dichlorobenzene	0.0	ug/l	03/12/2001	EPA 3520	
1,4-Dichlorobenezene	0.0	ug/l	03/12/2001	EPA 3520	
Benzyl Alcohol	0.0	ug/l	03/12/2001	EPA 3520	
1,2-Dichlorobezene	0.0	ug/l	03/12/2001	EPA 3520	
2-Methylphenol	0.0	ug/l	03/12/2001	EPA 3520	
Bis(2-Chloroisopropyl) Ether	0.0	ug/l	03/12/2001	EPA 3520	
3/4-Methylphenol	0.0	ug/l	03/12/2001	EPA 3520	
N-Nitroso-di-n-propylamine	0.0	ug/l	03/12/2001	EPA 3520	
Hexachloroethane	0.0	ug/l	03/12/2001	EPA 3520	
Nitrobenzene	0.0	ug/l	03/12/2001	EPA 3520	
Isophorone	0.0	ug/l	03/12/2001	EPA 3520	
2-Nitrophenol	0.0	ug/l	03/12/2001	EPA 3520	
2,4-Dimethylphenol	0.0	ug/l	03/12/2001	EPA 3520	
Benzoic Acid	0.0	ug/l	03/12/2001	EPA 3520	
Bis(-Chloroethoxy) Methane	0.0	ug/l	03/12/2001	EPA 3520	
2,4-Dichlorophenol	0.0	ug/l	03/12/2001	EPA 3520	
1,2,4-Trichlorobenzene	0.0	ug/l	03/12/2001	EPA 3520	
1,3,5-Trimethylene Benzene	0.0	ug/l	03/12/2001	EPA 3520	
4-Chloroaniline	0.0	ug/l	03/12/2001	EPA 3520	
Hexachloro-1,3 Butadiene	0.0	ug/l	03/12/2001	EPA 3520	
4-Chloro-3-Methylphenol	0.0	ug/l	03/12/2001	EPA 3520	
2-Methylnaphtalene	0.0	ug/l	03/12/2001	EPA 3520	
Hexachlorocyclopentadiene	0.0	ug/l	03/12/2001	EPA 3520	
2,4,6-Trichlorophenol-	0.0	ug/l	03/12/2001	EPA 3520	
2,4,5-Trichlorophenol-	0.0	ug/l	03/12/2001	EPA 3520	
2-Chloronapthalene	0.0	ug/l	03/12/2001	EPA 3520	

2-Nitroaniline	0.0	ug/l	03/12/2001	EPA 3520	
Dimethyl Phthalate	0.0	ug/l	03/12/2001	EPA 3520	
Acenaphthylene	0.0	ug/l	03/12/2001	EPA 3520	
3-Nitroaniline	0.0	ug/l	03/12/2001	EPA 3520	
Acenaphthene	0.0	ug/l	03/12/2001	EPA 3520	
2,4-Dinitrophenol1	0.0	ug/l	03/12/2001	EPA 3520	
4-Nitrophenol	0.0	ug/l	03/12/2001	EPA 3520	
Dibenzofuran	0.0	ug/l	03/12/2001	EPA 3520	
2,4-Dinitrotoulene	0.0	ug/l	03/12/2001	EPA 3520	
2,6-Dinitrotoulene	0.0	ug/l	03/12/2001	EPA 3520	
Diethy Phthalatel	0.0	ug/l	03/12/2001	EPA 3520	
4-Chlorophenyl-Phenyl Ether-	0.0	ug/l	03/12/2001	EPA 3520	
Fluorene-	0.0	ug/l	03/12/2001	EPA 3520	
4-Nitroaniline	0.0	ug/l	03/12/2001	EPA 3520	
Azobenzene	0.0	ug/l	03/12/2001	EPA 3520	
4,6-Dinitiro-2-Methylphenol	0.0	ug/l	03/12/2001	EPA 3520	
N-Nitrosodiphenylamine	0.0	ug/l	03/12/2001	EPA 3520	
4-Bromophenyl-Phenyl Ether	0.0	ug/l	03/12/2001	EPA 3520	
Hexachlorobenzene	0.0	ug/l	03/12/2001	EPA 3520	
Pentachlorophenol	0.0	ug/l	03/12/2001	EPA 3520	
Phenanthrene	0.0	ug/l	03/12/2001	EPA 3520	
Anthracene	0.0	ug/l	03/12/2001	EPA 3520	
Di-n-Butyl Phthalate	0.0	ug/l	03/12/2001	EPA 3520	
Fluoranthene	0.0	ug/l	03/12/2001	EPA 3520	
Benzidine	0.0	ug/l	03/12/2001	EPA 3520	
Pyrene	0.0	ug/l	03/12/2001	EPA 3520	
Pyridine	0.0	ug/l	03/12/2001	EPA 3520	
Butyl-Benzyl Phthalate	0.0	ug/l	03/12/2001	EPA 3520	
3,3'-Dichlorobenzidine	0.0	ug/l	03/12/2001	EPA 3520	
Benzo (a) Anthracene	0.0	ug/l	03/12/2001	EPA 3520	
Bis (2-Ethylhexy) Phthalate	0.0	ug/l	03/12/2001	EPA 3520	
Chrysene-	0.0	ug/l	03/12/2001	EPA 3520	
Di-n-Octyl Phthalate-	0.0	ug/l	03/12/2001	EPA 3520	
Benzo (b) Fluoranthene	0.0	ug/l	03/12/2001	EPA 3520	
Benzo (k) Fluoranthene	0.0	ug/l	03/12/2001	EPA 3520	
Benzo (k) Pyrene	0.0	ug/l	03/12/2001	EPA 3520	
Benzo (g,h,i) Perylene	0.0	ug/l	03/12/2001	EPA 3520	
Indeno (1,2,3-c,d) Pyrene	0.0	ug/l	03/12/2001	EPA 3520	
Dibenz (a,h) Anthracene-	0.0	ug/l	03/12/2001	EPA 3520	
1-Methylnaphthalene-	0.0	ug/l	03/12/2001	EPA 3520	

Long Beach Generating Station NPDES Monitoring Data 2001

C) RETENTION BASIN PRIORITY POLLUTANTS

Constituent & Date of Sample	Concentration		Units	Frequency of Analysis
	3rd Qtr	4th Qtr		
Date	08/07/2001	11/02/2001		
Total Cyanide	0.049	ND	mg/l	Quarterly
Antimony	14.99	0.025	ug/l	Quarterly
Arsenic	14.99	3.88	ug/l	Quarterly
Barium			ug/l	Quarterly
Beryllium	0.99	ND	ug/l	Quarterly
Cadmium	2.49	0.099	ug/l	Quarterly
Chromium (Total)	7.0	0.666	ug/l	Quarterly
Chromium, Hexavalent				Quarterly
Cobalt				Quarterly
Copper	27.0	2.19	ug/l	Quarterly
Lead	4.99	0.239	ug/l	Quarterly
Mercury	0.49	ND	ug/l	Quarterly
Molybdenum				Quarterly
Nickel	5.00	4.32	ug/l	Quarterly
Selenium	14.99	ND	ug/l	Quarterly
Silver	1.99	ND	ug/l	Quarterly
Thallium	14.99	ND	ug/l	Quarterly
Vanadium			ug/l	Quarterly
Zinc	27.0	8.56	ug/l	Quarterly
Alpha-BHC	0.09	ND	mg/l	Quarterly
Gamma-BHC	0.09	ND	mg/l	Quarterly
Beta-BHC	0.09	ND	ug/l	Quarterly
Heptachlor	0.09	ND	ug/l	Quarterly
Delta-BHC	0.09	ND	ug/l	Quarterly
Aldrin	0.09	ND	ug/l	Quarterly
Heptachlor Epoxide	0.09	ND	ug/l	Quarterly
Endosulfan I	0.09	ND	ug/l	Quarterly
Dieldrin	0.09	ND	ug/l	Quarterly
4,4'-DDE	0.09	ND	ug/l	Quarterly
Endrin	0.09	ND	ug/l	Quarterly
Endrin Aldehyde	0.09	ND	ug/l	Quarterly
4,4'-DDD	0.09	ND	ug/l	Quarterly
Endosulfan II	0.09	ND	ug/l	Quarterly
4,4'-DDT	0.09	ND	ug/l	Quarterly
Endosulfan Sulfate	0.09	ND	ug/l	Quarterly
Methoxychlor	0.09	ND	ug/l	Quarterly
Mirex		ND	ug/l	Quarterly
Toxaphane		ND	ug/l	Quarterly
Trans-nonachlor		ND	ug/l	Quarterly
2,4'-DDD		ND	ug/l	Quarterly
2,4'-DDE		ND	ug/l	Quarterly
2,4'-DDT		ND	ug/l	Quarterly
Chlordane	0.99	ND	ug/l	Quarterly
Toxaphene	1.99	ND	ug/l	Quarterly
Aroclor-1016	0.9	ND	ug/l	Quarterly
Aroclor-1221	0.9	ND	ug/l	Quarterly

Aroclor-1232	0.9	ND	ug/l	Quarterly
Aroclor-1242	0.9	ND	ug/l	Quarterly
Aroclor 1248	0.9	ND	ug/l	Quarterly
Aroclor 1254	0.9	ND	ug/l	Quarterly
Aroclor-1260	0.9	ND	ug/l	Quarterly
Aroclor-1262	0.9		ug/l	Quarterly
Endrin Ketone	0.09		ug/l	Quarterly
2,3,7,8 TCDD		ND	ug/l	Quarterly
bis(2-ethylhexyl) phthalate		ND	ug/l	Quarterly
Acetone	42.0	13.0	ug/l	Quarterly
Acrolein			ug/l	Quarterly
Acrylonitrile			ug/l	Quarterly
Benzene	0.49	ND	ug/l	Quarterly
Bromobenzene	0.9	ND	ug/l	Quarterly
Bromochloromethane	0.9	ND	ug/l	Quarterly
Bromodichloromethane	0.9	1.4	ug/l	Quarterly
Bromoform	0.9	ND	ug/l	Quarterly
Bromomethane-1242	0.9	ND	ug/l	Quarterly
2-Butanone	9.99	ND	ug/l	Quarterly
n-Butylbenzene	0.9	ND	ug/l	Quarterly
sec-Butylbenzene	0.9	ND	ug/l	Quarterly
tert-Butylbenzene	9.99	ND	ug/l	Quarterly
Carbon disulfide	9.99	ND	ug/l	Quarterly
Carbon Tetrachloride	0.49	ND	ug/l	Quarterly
Chlorobenzene	0.9	ND	ug/l	Quarterly
Chlorethane	0.9	ND	ug/l	Quarterly
2-Chlorethane		ND	ug/l	Quarterly
4-Chlorethane		ND	ug/l	Quarterly
Chlordane-alpha		ND	ug/l	Quarterly
Chlorodane-gamma		ND	ug/l	Quarterly
2-methyl-4,6 dinitrophenol		ND	ug/l	Quarterly
2-Chloroethyl Vinyl Ether			ug/l	Quarterly
Chlorform	0.9	1.0	ug/l	Quarterly
Chlormethane	0.9	ND	ug/l	Quarterly
2-Chlorotoluene	0.9	ND	ug/l	Quarterly
4-Chlorotoluene	0.9	ND	ug/l	Quarterly
Dibromochloromethane	0.9	1.9	ug/l	Quarterly
1,2-Dibromo-3-Chloropropane	4.99	ND	ug/l	Quarterly
1,2-Dibromoethane	0.9	ND	ug/l	Quarterly
Dibromomethane	0.9	ND	ug/l	Quarterly
1,2-Dichlorobenzene-1242	0.9	ND	ug/l	Quarterly
1,3-Dichlorobenzene	0.9	ND	ug/l	Quarterly
1,4-Dichlorobenzene	0.9	ND	ug/l	Quarterly
Dichlorodifluoromethane	0.9	ND	ug/l	Quarterly
1,1-Dichloroethane	0.9	ND	ug/l	Quarterly
1,2-Dichloroethane	0.49	ND	ug/l	Quarterly
1,1-Dichloroethane	0.9	ND	ug/l	Quarterly
c-1,2-Dichloroethane	0.9	ND	ug/l	Quarterly
t-1,2-Dichloroethane	0.9	ND	ug/l	Quarterly
1,2-Dichloropropane	0.9	ND	ug/l	Quarterly
1,3-Dichloropropane		ND	ug/l	Quarterly
2,2-Dichloropropane	0.9	ND	ug/l	Quarterly
1,1-Dichloropropene	0.9	ND	ug/l	Quarterly
c-1,3-Dichloropropene	0.49	ND	ug/l	Quarterly
t-1,3-Dichloropropene	0.49	ND	ug/l	Quarterly

Ethylbenzene	0.9	ND	ug/l	Quarterly
2-Hexanone	9.9	ND	ug/l	Quarterly
Isopropylbenzene	0.9	ND	ug/l	Quarterly
p-Isopropyltoluene	0.9	ND	ug/l	Quarterly
Methylene chloride	9.9	ND	ug/l	Quarterly
4-Methyl-2-Pentanone	9.9	ND	ug/l	Quarterly
Napthalene	9.9	ND	ug/l	Quarterly
n-Propylbenzene	0.9	ND	ug/l	Quarterly
Styrene	0.9	ND	ug/l	Quarterly
1,1,1,2-Tetrachloroethane	0.9	ND	ug/l	Quarterly
1,1,2,2-Tetrachloroethane	0.9	ND	ug/l	Quarterly
Tetrachloroethane	0.9	ND	ug/l	Quarterly
Toulene	0.9	ND	ug/l	Quarterly
1,2,3-Trichlorobenzene	0.9	ND	ug/l	Quarterly
1,2,4-Trichlorobenzene	0.9	ND	ug/l	Quarterly
1,1,1-Trichloroethane	0.9	ND	ug/l	Quarterly
1,1,2-Trichloroethane	0.9	ND	ug/l	Quarterly
Trichloroethene	0.9	ND	ug/l	Quarterly
Trichlorofluoromethane	9.9	ND	ug/l	Quarterly
1,2,3-Trichloropropane	4.9	ND	ug/l	Quarterly
1,2,4-Trimethylbenzene	0.9	ND	ug/l	Quarterly
Vinyl Acetate	9.99	ND	ug/l	Quarterly
Vinyl Chloride	0.49	ND	ug/l	Quarterly
p/m-Xylene	0.9	ND	ug/l	Quarterly
o-Xylene	0.9	ND	ug/l	Quarterly
Methyl-tert-Butyl Ether	0.9	ND	ug/l	Quarterly
N-Nitrosodimethylamine	9.9	ND	ug/l	Quarterly
Aniline	9.9		ug/l	Quarterly
Phenol	9.9	ND	ug/l	Quarterly
Bis(2-Chloroethyl) Ether	24.9	ND	ug/l	Quarterly
2-Chlorophenol	9.9	ND	ug/l	Quarterly
1,3-Dichlorobenzene	9.9		ug/l	Quarterly
1,4-Dichlorobenezene	9.9		ug/l	Quarterly
Benzyl Alcohol	9.9		ug/l	Quarterly
1,2-Dichlorobezene	9.9		ug/l	Quarterly
2-Methylphenol	9.9		ug/l	Quarterly
Bis(2-Chloroisopropyl) Ether	9.9	ND	ug/l	Quarterly
3/4-Methylphenol	9.9		ug/l	Quarterly
N-Nitroso-di-n-propylamine	9.9	ND	ug/l	Quarterly
Hexachloroethane	9.9		ug/l	Quarterly
Nitrobenzene	24.9	ND	ug/l	Quarterly
Isophorone	9.9	ND	ug/l	Quarterly
2-Nitrophenol	9.9	ND	ug/l	Quarterly
2,4-Dimethylphenol	9.9	ND	ug/l	Quarterly
Benzonic Acid	49.99		ug/l	Quarterly
Bis(-Chloroethoxy) Methane	9.9		ug/l	Quarterly
2,4-Dichlorophenol	9.9	ND	ug/l	Quarterly
1,2,4-Trichlorobenzene	9.9		ug/l	Quarterly
Napthalene	9.9	ND	ug/l	Quarterly
4-Chloroaniline	9.9	ND	ug/l	Quarterly
Hexachloro-1,3 Butadiene	9.9	ND	ug/l	Quarterly
4-Chloro-3-Methylphenol	9.9	ND	ug/l	Quarterly
2-Methylnaphtalene	9.9	ND	ug/l	Quarterly
Hexachlorocyclopentadiene	24.99	ND	ug/l	Quarterly
2,4,6-Trichlorophenol	9.9	ND	ug/l	Quarterly

2,4,5-Trichlorophenol	9.9		ug/l	Quarterly
2-Chloronaphthalene	9.9	ND	ug/l	Quarterly
2-Nitroaniline	9.9		ug/l	Quarterly
Dimethyl Phthalate	9.9	ND	ug/l	Quarterly
Acenaphthylene	9.9	ND	ug/l	Quarterly
3-Nitroaniline	9.9		ug/l	Quarterly
Acenaphthene	9.9	ND	ug/l	Quarterly
2,4-Dinitrophenol	49.9	ND	ug/l	Quarterly
4-Nitrophenol	9.9	ND	ug/l	Quarterly
Dibenzofuran	9.9		ug/l	Quarterly
2,4-Dinitrotoulene	9.9	ND	ug/l	Quarterly
2,6-Dinitrotoulene	9.9	ND	ug/l	Quarterly
Diethy Phthalate	9.9	10.0	ug/l	Quarterly
4-Chlorophenyl-Phenyl Ether	9.9	ND	ug/l	Quarterly
Fluorene	9.9	ND	ug/l	Quarterly
4-Nitroaniline	9.9		ug/l	Quarterly
Azobenzene	9.9	ND	ug/l	Quarterly
4,6-Dinitro-2-Methylphenol	49.9		ug/l	Quarterly
N-Nitrosodiphenylamine	9.9		ug/l	Quarterly
4-Bromophenyl-Phenyl Ether	9.9		ug/l	Quarterly
Hexachlorobenzene	9.9		ug/l	Quarterly
Pentachlorophenol	9.9	ND	ug/l	Quarterly
Phenanthrene	9.9	ND	ug/l	Quarterly
Anthracene	9.9	ND	ug/l	Quarterly
Di-n-Butyl Phthalate	9.9	19.0	ug/l	Quarterly
Fluoranthene	9.9	ND	ug/l	Quarterly
Benzidine	49.9	ND	ug/l	Quarterly
Pyrene	9.9		ug/l	Quarterly
Pyridine	9.9	ND	ug/l	Quarterly
Butyl-Benzyl Phthalate	9.9		ug/l	Quarterly
3,3'-Dichlorobenzidine	24.9	ND	ug/l	Quarterly
Benzo (a) Anthracene	9.9		ug/l	Quarterly
Bis (2-Ethylhexy) Phthalate	9.9	57.0	ug/l	Quarterly
Chrysene-	9.9	ND	ug/l	Quarterly
Di-n-Octyl Phthalate-	9.9	ND	ug/l	Quarterly
Benzo (b) Fluoranthene	9.9	ND	ug/l	Quarterly
Benzo (a) Pyrene		ND	ug/l	Quarterly
Benzo (k) Fluoranthene	9.9	ND	ug/l	Quarterly
Benzo (k) Pyrene	9.9	ND	ug/l	Quarterly
Benzo (g,h,i) Perylene	9.9		ug/l	Quarterly
Indeno (1,2,3-c,d) Pyrene	9.9	ND	ug/l	Quarterly
Dibenz (a,h) Anthracene	9.9		ug/l	Quarterly
1-Methylnaphthalene	9.9	ND	ug/l	Quarterly
EPA Method 8290-2,3,7,8 TCDD	0.000049	ND	ng/ml	Quarterly
1-Methyphenanthrene		ND	ug/l	Quarterly
2,3,5Trimethylnaphthalene		ND	ug/l	Quarterly
2,6 Dimethynaphthalene		ND	ug/l	Quarterly
Benzoelopyrene			ug/l	Quarterly
Indeno (1,2,3-c,d) Pyrene		ND	ug/l	Quarterly
Perylene		ND	ug/l	Quarterly

***Long Beach Generating Station
NPDES Monitoring Data
2002***

Long Beach Generating Station
NPDES Monitoring Data Summary 2002

Long Beach Generation LLC Long Beach Generating Station 2002												
Discharge No. 001	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Effluent												
pH (Max)	8.0	8.0	8.0	8.1	8.0	8.0	8.1	8.0	8.0	8.0	8.0	8.0
pH (Min)	7.7	7.9	7.8	7.8	7.9	7.9	7.9	7.9	7.7	7.7	7.8	7.8
Flow (Max) MGD	61.2	93.2	74.3433	72	72.3	134.3	133.7	96.3	131.2	64.6	164.2	149.8
Flow (Avg) MGD	60.35	65.493	74.3433	68.636	70.564	80.43	59.103	38.537	38.476	27.457	96	61.703
Circ. Water Discharge												
Temp (Max) °F	68	64	66	68	75	70	75	81	77	79	84	72
Temp (Min) °F	59	61	61	61	63	68	70	70	59	66	68	57
Heat Treat Temp °F												
Chlorine												
Total - Avg (mg/l)	0.05	0.09	0.07	0.10	0.18	0.05	0.09	0.10	0.12	0.06	0.15	0.06
Total - Max (mg/l)	0.06	0.19	0.17	0.19	0.20	0.20	0.18	0.17	0.18	0.11	0.19	0.15
Total - Min (mg/l)	0.04	0.04	0.04	0.04	0.17	0.04	0.04	0.05	0.06	0.03	0.06	0.05
Free - Avg (mg/l)	0.04	0.08	0.06	0.12	0.16	0.05	0.08	0.09	0.11	0.06	0.12	0.05
Free - Max (mg/l)	0.05	0.18	0.16	0.20	0.19	0.19	0.17	0.16	0.16	0.08	0.19	0.06
Free - Min (mg/l)	0.04	0.03	0.04	0.05	0.13	0.04	0.04	0.05	0.05	0.04	0.04	0.04

Long Beach Generation LLC Long Beach Generating Station 2002												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Low Volume Waste												
pH (Max)	7.8	7.9	7.8	7.9	7.8	7.6	7.7	7.7	7.9	7.9	7.8	7.8
pH (Min)	7.7	7.8	7.8	7.9	7.8	7.6	7.7	7.7	7.8	7.9	7.7	7.8
Total Suspended Solids - Max (mg/l)	7.8	9.4	6.4	8.1	5.5	19.0	8.1	7.2	24.8	13.5	14.4	14.6
Total Suspended Solids - Avg (mg/l)	6.2	9.3	6.6	7.8	5.4	18.0	8.1	6.9	21.3	12.8	13.4	12.3
Oil & Grease-Max (mg/l)	2.6	ND	ND	ND	0.4	1.2	ND	ND	ND	ND	ND	ND
Oil & Grease-Min (mg/l)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Flow Rate (MGD)	1.692	0.000	0.000	0.000	3.186	1.512	1.800	1.908	1.782	0.000	1.836	1.836

Long Beach Generation LLC Long Beach Generating Station 2002												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Oil Recovery System												
Flow Rate (MGD)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Suspended Solids - Max (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Suspended Solids - Avg (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Settleable Solids-Max (ml/l)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Settleable Solids-Avg (ml/l)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B.O.D. - Max (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B.O.D. - Min (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Grease-Max (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil & Grease-Min (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Surfactants (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phenolics, Total (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Arsenic, Total (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cadmium, Total (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chromium Hexavalent (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lead, Total (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
pH (Max)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
pH (Min)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

C) PRIORITY POLLUTANTS	Intake Annual Average
Arsenic	0.145
Cadmium	0.825
Chromium, Total	0.04
Chromium, Hexavalent	0.3
Copper	1.945
Lead	0.16
Mercury	0.07
Nickel	0.625
Selenium	0.05
Silver	0.2
Zinc	14.575

Outfall Annual Average
0.865
0.1
ND
ND
2.09
0.315
0.09
1.16
0.06
0.225
15.95

Long Beach Generating Station - NPDES Monitoring Data Summary 2002

RETENTION BASIN PRIORITY POLLUTANTS

Constituent & Date of Sample	Concentration				Units	Frequency of Analysis
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr		
Date	01/17/2002	05/01/2002	08/13/2002	11/05/2002		

Antimony	0.01	0.064	0.01	0.107	ug/l	Quarterly
Arsenic	5.83	8.29	6.35	8.0	ug/l	Quarterly
Barium					ug/l	Quarterly
Beryllium	ND	ND	ND	ND	ng/l	Quarterly
Cadmium	ND	0.053	0.01	0.093	ug/l	Quarterly
Chromium (Total)	0.89	0.99	0.49	1.8	ug/l	Quarterly
Chromium, Hexavalent					ng/l	Quarterly
Cobalt						Quarterly
Copper	1.95	2.13	2.35	21.4	ug/l	Quarterly
Lead	0.30	0.336	0.21	2.2	ug/l	Quarterly
Mercury	ND	ND	ND	ND	ug/l	Quarterly
Nickel	0.87	1.44	1.91	9.21	ug/l	Quarterly
Selenium	0.04	2.32	0.04	ND	ug/l	Quarterly
Silver	ND	ND	ND	ND	ug/l	Quarterly
Thallium	0.01	0.022	ND	ND	ug/l	Quarterly
Zinc	18.7	12.5	8.19	43.6	ug/l	Quarterly

1,1,1,2-Tetrachloroethane	ND	ND	ND		ug/l	Quarterly
1,1,1-Trichloroethane	ND	ND	ND	ND	ug/l	Quarterly
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ug/l	Quarterly
1,1,2-Trichloroethane	ND	ND	ND	ND	ug/l	Quarterly
1,1-Dichloroethane	ND	ND	ND	ND	ug/l	Quarterly
1,1-Dichloropropene			ND	ND	ug/l	Quarterly
1,2,3-Trichlorobenzene		ND	ND	ND	ug/l	Quarterly
1,2,3-Trichloropropane		ND	ND	ND	ug/l	Quarterly
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ug/l	Quarterly
1,2,4-Trimethylbenzene		ND	ND	ND	ug/l	Quarterly
1,2-Dibromoethane		ND	ND	ND	ug/l	Quarterly
1,2-Dichlorobenzene-1242					ug/l	Quarterly
1,2-Dichlorobenzene	ND	ND	ND	ND	ug/l	Quarterly
1,2-Dichloroethane	ND	ND	ND	ND	ug/l	Quarterly
1,2-Dichloropropane	ND	ND	ND	ND	ug/l	Quarterly
1,2-Diphenylhydrazine	ND		ND		ug/l	Quarterly
1,3-Dichlorobenzene	ND	ND	ND	ND	ug/l	Quarterly
1,3,5-Trimethylbenzene		ND	ND	ND	ug/l	Quarterly
1,3-Dichloropropane		ND	ND	ND	ug/l	Quarterly
1,4-Dichlorobenzene	ND	10.0	ND	13.3	ug/l	Quarterly
1,2-Dibromo-3-Chloropropane		ND	ND	ND	ng/l	Quarterly
1-Methylnaphthalene	ND	ND			ng/l	Quarterly
1-Methylphenanthrene	ND	ND			ng/l	Quarterly
2,2-Dichloropropane		ND	ND	ND	ng/l	Quarterly
2,3,5-Trimethylnaphthalene	ND	ND			ng/l	Quarterly
2,3,7,8 TCDD	nd	ND	ND	ND	ng/l	Quarterly
2,4,5-Trichlorophenol					ng/l	Quarterly

2,4,6-Trichlorophenol	ND	ND	ND	ND	ng/l	Quarterly
2,4'-DDE	ND	ND			ng/l	Quarterly
2,4'-DDT	ND	ND			ng/l	Quarterly
2,4-Dichlorophenol	ND	ND	ND	ND	ng/l	Quarterly
2,4-Dimethylphenol	ND	ND	ND	ND	ng/l	Quarterly
2,4-Dinitrophenol	ND	ND	ND	ND	ng/l	Quarterly
2,4-Dinitrotoulene	ND	ND	ND	ND	ng/l	Quarterly
2,6 Dimethnaphthalene	9.3	ND			ng/l	Quarterly
2,6-Dinitrotoulene	82.0	ND	ND	ND	ng/l	Quarterly
2,4'-DDD	ND	ND			ng/l	Quarterly
2-Butanone		ND	ND	ND	ug/l	Quarterly
2-Chlorethane					ng/l	Quarterly
2-Chloroethyl Vinyl Ether	ND	ND		ND	ng/l	Quarterly
2-Chloronaphthalene	ND	ND	ND	ND	ng/l	Quarterly
2-Chlorophenol	ND	ND	ND	ND	ug/l	Quarterly
2-Chlorotoluene		ND	ND	ND	ug/l	Quarterly
2-Hexanone		ND	ND	ND	ug/l	Quarterly
2-methyl-4,6 dinitrophenol	ND	ND	ND	ND	ng/l	Quarterly
2-Methylnaphthalene	5.0	ND			ng/l	Quarterly
2-Methylphenol					ng/l	Quarterly
2-Nitroaniline					ng/l	Quarterly
2-Nitrophenol	ND	ND	ND	ND	ng/l	Quarterly
3,3'-Dichlorobenzidine	ND		ND	ND	ng/l	Quarterly
3/4-Methylphenol					ng/l	Quarterly
3-Nitroaniline					ng/l	Quarterly
4,4'-DDD	ND	ND	ND	ND	ng/l	Quarterly
4,4'-DDE	ND	ND	ND	ND	ng/l	Quarterly
4,4'DDT	ND	ND	ND	ND	ng/l	Quarterly
4,6-Dinitiro-2-Methylphenol					ng/l	Quarterly
4-Bromophenyl-Phenyl Ether	ND	ND	ND	ND	ng/l	Quarterly
4-Chlorethane					ng/l	Quarterly
4-Chloro-3-Methylphenol	ND	ND	ND	ND	ng/l	Quarterly
4-Chlorooaniline					ng/l	Quarterly
4-Chlorophenyl-Phenyl Ether	ND	ND	ND	ND	ng/l	Quarterly
4-Chlorotoluene		ND	ND		ug/l	Quarterly
4-Methyl-2-Pentanone		ND	ND		ug/l	Quarterly
4-Nitroaniline					ng/l	Quarterly
4-Nitrophenol	ND	ND	ND	ND	ng/l	Quarterly
Acenaphthene	ND	ND	ND	ND	ug/l	Quarterly
Acenaphthylene	ND	ND	ND	ND	ng/l	Quarterly
Acetone		ND	ND		ug/l	Quarterly
Acrolein		ND		ND	ng/l	Quarterly
Acrylonitrile		ND		ND	ng/l	Quarterly
Aldrin	ND	ND	ND	ND	ng/l	Quarterly
Alpha-BHC	ND	ND	ND	ND	ng/l	Quarterly
Aniline					ng/l	Quarterly
Anthracene	ND	ND	ND	ND	ng/l	Quarterly
Arcotor 1248	ND	ND	ND	ND	ng/l	Quarterly
Arcotor 1254	ND	ND	ND	ND	ng/l	Quarterly
Aroctor-1016	ND	ND	ND	ND	ng/l	Quarterly
Aroctor-1221	ND	ND	ND	ND	ng/l	Quarterly
Aroctor-1232	ND	ND	ND	ND	ng/l	Quarterly

Aroclor-1242	ND	ND	ND	ND	ng/l	Quarterly
Aroclor-1260	ND	ND	ND	ND	ng/l	Quarterly
Aroclor-1262					ng/l	Quarterly
Azobenzene	ND	ND		ND	ng/l	Quarterly
Benzene	ND	ND	ND	ND	ug/l	Quarterly
Benzidine	ND	ND	ND	ND	ng/l	Quarterly
Benzo (a) Anthracene	ND	ND	ND	ND	ng/l	Quarterly
Benzo (a) Pyrene	ND	ND	ND	ND	ng/l	Quarterly
Benzo (b) Fluoranthene	ND	ND	ND	ND	ng/l	Quarterly
Benzo (e) Pyrene	ND	ND			ng/l	Quarterly
Benzo (g,h,i) Perylene	ND	ND	ND	ND	ng/l	Quarterly
Benzo (k) Fluoranthene	ND	ND	ND	ND	ng/l	Quarterly
Benzo (k) Pyrene					ng/l	Quarterly
Benzolepyrene					ng/l	Quarterly
Benzoic Acid					ng/l	Quarterly
Benzyl Alcohol					ng/l	Quarterly
Beta-BHC	ND	ND	ND	ND	ng/l	Quarterly
Biphenyl	2.7	ND			ng/l	Quarterly
Bis (2-Ethylhexy) Phthalate	108.0	65.0	157.0	76.7	ng/l	Quarterly
Bis(2-Chloroethyl) Ether	ND	ND	ND	ND	ng/l	Quarterly
Bis(2-Chloroisopropyl) Ether	ND	ND	ND	ND	ng/l	Quarterly
bisbenzyl phthalate	40.0		ND		ng/l	Quarterly
Bis(-Chloroethoxy) Methane	ND	ND	ND	ND	ng/l	Quarterly
Bromobenzene		ND	ND	ND	ug/l	Quarterly
Bromochloromethane		ND	ND	ND	ug/l	Quarterly
Bromodichloromethane	ND	ND	ND	2.0	ug/l	Quarterly
Bromoform	ND	ND	ND	ND	ug/l	Quarterly
Bromomethane	ND	ND	ND	ND	ng/l	Quarterly
Butyl-Benzyl Phthalate	ND	19.0	ND	24.9	ug/l	Quarterly
c-1,2-Dichloroethane	ND	ND	ND	ND	ug/l	Quarterly
c-1,3-Dichloropropene	ND	ND	ND	ND	ug/l	Quarterly
C-Xylene	ND	ND		ND	ug/l	Quarterly
Carbon disulfide		ND	ND	ND	ng/l	Quarterly
Carbon Tetrachloride	ND	ND	ND	ND	ng/l	Quarterly
Chlordane					ng/l	Quarterly
Chlordane-alpha	ND	ND	ND	ND	ng/l	Quarterly
Chlorodane-gamma	ND	ND	ND	ND	ng/l	Quarterly
Chlorethane		ND	ND	ND	ng/l	Quarterly
Chlorform	ND	ND	ND	1.0	ng/l	Quarterly
Chlormethane	ND	ND	ND	ND	ug/l	Quarterly
Chlorobenzene	ND	ND	ND	ND	ug/l	Quarterly
Chlorodane-alpha	ND			ND	ng/l	Quarterly
Chlorodane-gamma	ND			ND	ng/l	Quarterly
Chrysene-	ND	ND	ND	ND	ng/l	Quarterly
Delta-BHC	ND	ND	ND	ND	ng/l	Quarterly
Dibenz (a,h) Anthracene	ND	ND	ND	ND	ng/l	Quarterly
Dibenzofuran					ng/l	Quarterly
Dibromochloromethane	ND	ND	ND	2.7	ug/l	Quarterly
Dibromomethane		ND	ND	ND	ug/l	Quarterly
Dichlorodifluoromethane		ND	ND	ND	ng/l	Quarterly
Dieldrin	ND	ND	ND	ND	ng/l	Quarterly
Diethy Pthalatel	20.0	39.0	57.0	25.7	ng/l	Quarterly

Dimethyl Phthalate	ND	ND	ND	ND	ng/l	Quarterly
Di-n-Butyl Phthalate	128.0	40.0	30.0	63.9	ng/l	Quarterly
Di-n-Octyl Phthalate-	10.0	ND	ND	ND	ng/l	Quarterly
Endosulfan I	ND	ND	ND	ND	ng/l	Quarterly
Endosulfan II	ND	ND	ND	ND	ng/l	Quarterly
Endosulfan Sulfate	ND	ND	ND	ND	ng/l	Quarterly
Endrin	ND	ND	ND	ND	ng/l	Quarterly
Endrin Aldehyde	ND	ND	ND	ND	ng/l	Quarterly
Endrin Ketone	ND				ng/l	Quarterly
EPA Method 8290-2,3,7,8 TCDD					ng/l	Quarterly
Ethylbenzene	ND	ND	ND	ND	ug/l	Quarterly
Fluoranthene	3.8	ND	4.1	ND	ng/l	Quarterly
Fluorene	ND	ND	11.1	ND	ng/l	Quarterly
Gamma-BHC	ND	ND	ND	ND	ng/l	Quarterly
Heptachlor	ND	ND	ND	ND	ng/l	Quarterly
Heptachlor Epoxide	ND	ND	ND	ND	ng/l	Quarterly
Hexachloro-1,3 Butadiene					ng/l	Quarterly
Hexachlorobutadiene	ND	ND	ND		ng/l	Quarterly
Hexachlorobenzene	ND	ND	ND	ND	ng/l	Quarterly
Hexachlorocyclopentadiene	ND	ND	ND	ND	ng/l	Quarterly
Hexachloroethane	ND	ND	ND	ND	ng/l	Quarterly
Indeno (1,2,3-c,d) Pyrene	ND	ND	ND	ND	ng/l	Quarterly
Isophorone	ND	ND	ND	ND	ng/l	Quarterly
Isopropylbenzene		ND	ND	ND	ug/l	Quarterly
Methoxychlor	ND	ND			ng/l	Quarterly
Methylene chloride	ND	ND	ND	ND	ug/l	Quarterly
Methyl-tert-Butyl Ether	ND	ND	ND	ND	ug/l	Quarterly
Mirex	ND	ND			ng/l	Quarterly
Molybdenum					ng/l	Quarterly
Napthalene	6.5	ND	29.4	ND	ug/l	Quarterly
n-Butylbenzene		ND	ND		ng/l	Quarterly
Nitrobenzene	ND	ND	ND	ND	ug/l	Quarterly
N-Nitrosodimethylamine	ND	ND	ND	ND	ng/l	Quarterly
N-Nitroso-di-n-propylamine	ND	ND	ND	ND	ng/l	Quarterly
N-Nitrosodiphenylamine	ND	ND	ND	ND	ng/l	Quarterly
n-Propylbenzene		ND	ND	ND	ug/l	Quarterly
o-Xylene	ND	ND	ND	ND	ug/l	Quarterly
p/m-Xylene		ND	ND	ND	ng/l	Quarterly
Pentachlorophenol	ND	ND	ND	ND	ng/l	Quarterly
Perylene	ND	ND			ng/l	Quarterly
Phenanthrene	ND	ND	11.7	ND	ng/l	Quarterly
Phenol	ND	ND	ND	ND	ng/l	Quarterly
p-Isopropyltoluene		ND	ND	ND	ug/l	Quarterly
Pyrene	6.4	ND	10.1	ND	ng/l	Quarterly
Pyridine					ng/l	Quarterly
sec-Butylbenzene		ND	ND	ND	ug/l	Quarterly
Styrene		ND	ND	ND	ug/l	Quarterly
t-1,2-Dichloroethene	ND	ND	ND	ND	ng/l	Quarterly
t-1,3-Dichloropropene	ND	ND	ND	ND	ug/l	Quarterly
tert-Butylbenzene		ND	ND	ND	ng/l	Quarterly
Tetrachloroethane	ND	ND	ND	ND	ug/l	Quarterly

Total Cyanide		ND		ND	mg/l	Quarterly
Total Detectable PAHs	33.7	0.0			ng/l	Quarterly
Toulene	ND	ND	ND	ND	ng/l	Quarterly
Toxaphene	ND	ND	ND	ND	ng/l	Quarterly
Trans-nonachlor	ND	ND			ng/l	Quarterly
Trichloroethene	ND	ND	ND	ND	ug/l	Quarterly
Trichlorofluoromethane	ND	ND	ND	ND	ug/l	Quarterly
Vinyl Acetate		ND	ND	ND	ug/l	Quarterly
Vinyl Chloride	ND	ND	ND	ND	ug/l	Quarterly

***Long Beach Generating Station
NPDES Monitoring Data
2003***

Long Beach Generating Station
NPDES Monitoring Data Summary 2003

<div> <div>2003</div> <div> Long Beach Generation LLC Long Beach Generating Station 2003 </div> </div>												
Discharge No. 001	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Effluent												
pH (Max)	8.0	8.0	8.0	7.9	7.9	8.1	8.0	7.9	7.9	7.7	7.9	7.9
pH (Min)	7.9	7.9	7.8	7.7	7.7	8.0	7.9	7.8	7.8	7.6	7.8	7.8
Flow (Max) MGD	89.9	72.4	131.2	71.9	131	131.1	162.7	182.1	131.4	95.6	72.5	131.5
Flow (Avg) MGD	67.219	61.917	68.72	60.4467	68.2	64.343	81.17	98.093	87.347	65.017	65.967	69.67
Circ. Water Discharge												
Temp (Max) °F	79	73	70	72	73	72	81	81	72	73	68	77
Temp (Min) °F	63	66	68	64	66	66	72	66	68	68	66	63
Heat Treat Temp °F			225									
Chlorine												
Total - Avg (mg/l)	0.15	0.04	0.12	0.05	0.10	0.16	0.12	0.15	0.08	0.08	0.06	0.05
Total - Max (mg/l)	0.20	0.06	0.19	0.09	0.20	0.20	0.19	0.20	0.15	0.20	0.09	0.07
Total - Min (mg/l)	0.07	0.03	0.06	0.03	0.04	0.07	0.04	0.04	0.04	0.04	0.04	0.03
Free - Avg (mg/l)	0.12	0.04	0.09	0.06	0.10	0.15	0.10	0.13	0.07	0.06	0.06	0.05
Free - Max (mg/l)	0.19	0.05	0.17	0.13	0.19	0.19	0.15	0.19	0.13	0.17	0.08	0.07
Free - Min (mg/l)	0.03	0.03	0.05	0.04	0.04	0.06	0.04	0.04	0.03	0.03	0.03	0.03
<div> Long Beach Generation LLC Long Beach Generating Station 2003 </div>												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Low Volume Waste												
pH (Max)	7.7	7.8	7.7	7.7	7.7	7.8	8.0	7.9	7.8	7.8	7.8	8.2
pH (Min)	7.7	7.8	7.7	7.7	7.6	7.8	8.0	7.9	7.8	7.7	7.6	8.2
Total Suspended Solids - Max (mg/l)	2.1	16.5	6.7	23.8	13.8	24.1	29.5	13.8	7.6	10.0	8.2	11.2
Total Suspended Solids - Avg (mg/l)	2.0	15.3	5.5	12.3	13.7	21.8	27.1	13.3	7.5	9.7	6.1	10.3
Oil & Grease-Max (mg/l)	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND
Oil & Grease-Min (mg/l)	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	0.9	ND
Flow Rate (MGD)	1.656	2.304	1.926	0.954	1.620	1.764	2.700	4.500	0.000	3.024	1.260	1.170

Long Beach Generating Station - NPDES Monitoring Data Summary 2003

D) RETENTION BASIN PRIORITY POLLUTANTS

Constituent & Date of Sample	Concentration			Units	Frequency of Analysis
	1st Qtr	2nd Qtr	3rd Qtr		
Date	2/5/03	5/7/03	8/6/03		

Antimony	0.032	0.21	0.11	ug/l	Quarterly
Arsenic	5.490	8.51	7.52	ug/l	Quarterly
Barium				ug/l	Quarterly
Beryllium	ND	ND	ND	ng/l	Quarterly
Cadmium	0.018	0.03	ND	ug/l	Quarterly
Chromium (Total)	ND	0.85	1.56	ug/l	Quarterly
Chromium, Hexavalent	0.385			ng/l	Quarterly
Cobalt					Quarterly
Copper	1.710	1.53	2.27	ug/l	Quarterly
Cyanide	ND			ug/l	Quarterly
Lead	0.064	0.2	0.248	ug/l	Quarterly
Mercury	0.048	0.0	0.057	ug/l	Quarterly
Nickel	1.54	1.73	1.37	ug/l	Quarterly
Selenium	ND	ND	0.06	ug/l	Quarterly
Silver	ND	ND	ND	ug/l	Quarterly
Thallium	ND	ND	ND	ug/l	Quarterly
Zinc	8.91	15.9	12.00	ug/l	Quarterly

1,1,1,2-Tetrachloroethane	ND	ND		ug/l	Quarterly
1,1,1-Trichloroethane	ND	ND	ND	ug/l	Quarterly
1,1,2,2-Tetrachloroethane	ND	ND	ND	ug/l	Quarterly
1,1,2-Trichloroethane	ND	ND	ND	ug/l	Quarterly
1,1-Dichloroethane	ND	ND	ND	ug/l	Quarterly
1,1-Dichloroethylene	ND				
1,1-Dichloropropene				ug/l	Quarterly
1,2,3-Trichlorobenzene				ug/l	Quarterly
1,2,3-Trichloropropane				ug/l	Quarterly
1,2,4-Trichlorobenzene	ND	ND	ND	ug/l	Quarterly
1,2,4-Trimethylbenzene				ug/l	Quarterly
1,2-Dibromoethane	ND			ug/l	Quarterly
1,2-Dichlorobenzene-1242				ug/l	Quarterly
1,2-Dichlorobenzene	ND	ND	ND	ug/l	Quarterly
1,2-Dichloroethane	ND	ND	ND	ug/l	Quarterly
1,2-Dichloropropane	ND	ND	ND	ug/l	Quarterly
1,2-Diphenylhydrazine	ND			ug/l	Quarterly
1,2-Trans-Dichloroethylene	ND			ug/l	Quarterly
1,3-Dichlorobenzene	ND	ND	ND	ug/l	Quarterly
1,3-Dichloropropylene	ND				
1,3,5-Trimethylbenzene				ug/l	Quarterly
1,3-Dichloropropane				ug/l	Quarterly
1,4-Dichlorobenzene	ND	ND	ND	ug/l	Quarterly
1,2-Dibromo-3-Chloropropane				ng/l	Quarterly
1-Methylnaphthalene	ND			ng/l	Quarterly
1-Methylphenanthrene	ND			ng/l	Quarterly
2,2-Dichloropropane				ng/l	Quarterly
2,3,5 Trimethylnaphthalene	ND			ng/l	Quarterly

2,3,7,8 TCDD	ND	ND	ND	ng/l	Quarterly
2,4,5-Trichlorophenol				ng/l	Quarterly
2,4,6-Trichlorophenol	ND	ND	ND	ng/l	Quarterly
2,4'-DDD			ND	ng/l	Quarterly
2,4'-DDE	ND	ND	ND	ng/l	Quarterly
2,4'-DDT	ND	ND	ND	ng/l	Quarterly
2,4-Dichlorophenol	ND	ND	ND	ng/l	Quarterly
2,4-Dimethylphenol	ND	ND	ND	ng/l	Quarterly
2,4-Dinitrophenol	ND	ND	ND	ng/l	Quarterly
2,4-Dinitrotoulene	ND	ND	ND	ng/l	Quarterly
2,6 Dimethnaphthalene	ND			ng/l	Quarterly
2,6-Dinitrotoulene	ND	ND	ND	ng/l	Quarterly
2,4'-DDD	ND	ND		ng/l	Quarterly
2-Butanone				ug/l	Quarterly
2-Chlorethane				ng/l	Quarterly
2-Chloroethyl Vinyl Ether	ND	ND	ND	ng/l	Quarterly
2-Chloronaphthalene	ND	ND	ND	ng/l	Quarterly
2-Chlorophenol	ND	ND	ND	ug/l	Quarterly
2-Chlorotoluene				ug/l	Quarterly
2-Hexanone				ug/l	Quarterly
2-methyl-4,6 dinitrophenol	ND	ND	ND	ng/l	Quarterly
2-Methylnaphtalene	ND			ng/l	Quarterly
2-Methylphenol				ng/l	Quarterly
2-Nitroaniline				ng/l	Quarterly
2-Nitrophenol	ND	ND	ND	ng/l	Quarterly
3,3'-Dichlorobenzidine	ND	ND	ND	ng/l	Quarterly
3,4-Methylphenol				ng/l	Quarterly
3-Methyl-4-Chlorophenol	ND			ng/l	Quarterly
3-Nitroaniline				ng/l	Quarterly
4,4'-DDD	ND	ND	ND	ng/l	Quarterly
4,4'-DDE	ND	ND	ND	ng/l	Quarterly
4,4'DDT	ND	ND	ND	ng/l	Quarterly
4,6-Dinitiro-2-Methylphenol				ng/l	Quarterly
4-Bromophenyl-Phenyl Ether	ND	ND	ND	ng/l	Quarterly
4-Chlorethane				ng/l	Quarterly
4-Chloro-3-Methylphenol		ND	ND	ng/l	Quarterly
4-Chlorooaniline				ng/l	Quarterly
4-Chlorophenyl-Phenyl Ether	ND	ND	ND	ng/l	Quarterly
4-Chlorotoluene				ug/l	Quarterly
4-Methyl-2-Pentanone				ug/l	Quarterly
4-Nitroaniline				ng/l	Quarterly
4-Nitrophenol	ND	ND	ND	ng/l	Quarterly
Acenaphthene	ND	ND	ND	ug/l	Quarterly
Acenaphthylene	ND	ND	ND	ng/l	Quarterly
Acetone				ug/l	Quarterly
Acrolein	ND	ND	ND	ng/l	Quarterly
Acrylonitrile	ND	ND	ND	ng/l	Quarterly
Aldrin	ND	ND		ng/l	Quarterly
Alpha-BHC	ND	ND	ND	ng/l	Quarterly
Alpha-Endosulfan	ND			ng/l	Quarterly
Analine				ng/l	Quarterly
Anthracene	ND	ND	ND	ng/l	Quarterly
Arcotor 1248	ND	ND	ND	ng/l	Quarterly
Arcotor 1254	ND	ND	ND	ng/l	Quarterly
Aroctor-1016	ND	ND	ND	ng/l	Quarterly

Aroclor-1221	ND	ND	ND	ng/l	Quarterly
Aroclor-1232	ND	ND	ND	ng/l	Quarterly
Aroclor-1242	ND	ND	ND	ng/l	Quarterly
Aroclor-1260	ND	ND	ND	ng/l	Quarterly
Aroclor-1262				ng/l	Quarterly
Azobenzene				ng/l	Quarterly
Benzene	ND	ND	ND	ug/l	Quarterly
Benzidine	ND	ND	ND	ng/l	Quarterly
Benzo (a) Anthracene	ND	ND	ND	ng/l	Quarterly
Benzo (a) Pyrene	ND	ND	ND	ng/l	Quarterly
Benzo (b) Fluoranthene	ND	ND	ND	ng/l	Quarterly
Benzo (e) Pyrene	ND	ND	ND	ng/l	Quarterly
Benzo (g,h,i) Perylene	ND	ND	ND	ng/l	Quarterly
Benzo (k) Fluoranthene	ND	ND	ND	ng/l	Quarterly
Benzo (k) Pyrene				ng/l	Quarterly
Benzolelpyrene				ng/l	Quarterly
Benzonic Acid				ng/l	Quarterly
Benzyl Alcohol				ng/l	Quarterly
Beta-BHC	ND	ND	ND	ng/l	Quarterly
Beta-Endosulfan	ND			ng/l	Quarterly
Biphenyl	ND			ng/l	Quarterly
Bis (2-Ethylhexy) Phthalate	0.1	ND	80.4	ng/l	Quarterly
Bis(2-Chloroethyl) Ether	ND	ND	ND	ng/l	Quarterly
Bis(2-Chloroisopropyl) Ether	ND	ND	ND	ng/l	Quarterly
Bis(2-Ethylhexy) Phthalate		302.0		ng/l	Quarterly
bisbenzyl phthalate				ng/l	Quarterly
Bis(-Chloroethoxy) Methane		ND	ND	ng/l	Quarterly
Bromobenzene				ug/l	Quarterly
Bromochloromethane				ug/l	Quarterly
Bromodichloromethane	1.8	ND	1.5	ug/l	Quarterly
Bromoform	1.5	ND	ND	ug/l	Quarterly
Bromomethane	ND	ND	ND	ng/l	Quarterly
Butyl-Benzyl Phthalate	0.0	42.0	ND	ug/l	Quarterly
c-1,2-Dichloroethane	ND		ND	ug/l	Quarterly
c-1,3-Dichloropropene	ND	ND	ND	ug/l	Quarterly
C-Xylene				ug/l	Quarterly
Carbon disulfide				ng/l	Quarterly
Carbon Tetrachloride	ND	ND	ND	ng/l	Quarterly
Chlordane	ND			ng/l	Quarterly
Chlordane-alpha	ND	ND	ND	ng/l	Quarterly
Chlorodane-gamma	ND	ND	ND	ng/l	Quarterly
Chlorethane	ND	ND	ND	ng/l	Quarterly
Chlorform	ND	ND	ND	ng/l	Quarterly
Chlormethane		ND	ND	ug/l	Quarterly
Chlorobenzene	ND	ND	ND	ug/l	Quarterly
Chlorodibromo methane	2.7			ug/l	Quarterly
Chrysene-	ND	ND	ND	ng/l	Quarterly
Cyanide			0.012	ng/l	Quarterly
Delta-BHC	ND	ND	ND	ng/l	Quarterly
Dibenz (a,h) Anthracene	ND	ND	ND	ng/l	Quarterly
Dibenzofuran				ng/l	Quarterly
Dibromochloromethane		ND	ND	ug/l	Quarterly
Dibromomethane	2.7			ug/l	Quarterly
Dichlorobromo-methane	2.7			ug/l	Quarterly
Dichlorodiflouromethane			ND	ng/l	Quarterly

Dieldrin	ND	ND	ND	ng/l	Quarterly
Diethy Phthalate	ND	ND	ND	ng/l	Quarterly
Dimethyl Phthalate	0.0	ND	ND	ng/l	Quarterly
Di-n-Butyl Phthalate	0.022	42.3	ND	ng/l	Quarterly
Di-n-Octyl Phthalate-	ND	ND	ND	ng/l	Quarterly
Endosulfan I	ND	ND	ND	ng/l	Quarterly
Endosulfan II	ND	ND	ND	ng/l	Quarterly
Endosulfan Sulfate	ND	ND	ND	ng/l	Quarterly
Endrin	ND	ND	ND	ng/l	Quarterly
Endrin Aldehyde	ND	ND	ND	ng/l	Quarterly
Endrin Ketone				ng/l	Quarterly
EPA Method 8290-2,3,7,8 TCDD	ND			ng/l	Quarterly
Ethylbenzene	ND	ND	9.3	ug/l	Quarterly
Fluoranthene	ND	ND	ND	ng/l	Quarterly
Fluorene	ND	ND		ng/l	Quarterly
Gamma-BHC	ND	ND	ND	ng/l	Quarterly
Heptachlor	ND	ND	ND	ng/l	Quarterly
Heptachlor Epoxide	ND	ND	ND	ng/l	Quarterly
Hexachloro-1,3 Butadiene				ng/l	Quarterly
Hexachloralbutadiene	ND	ND	ND	ng/l	Quarterly
Hexachlorobenzene	ND	ND	ND	ng/l	Quarterly
Hexachlorocyclopentadiene	ND	ND	ND	ng/l	Quarterly
Hexachloroethane	ND	ND	ND	ng/l	Quarterly
Indeno (1,2,3-c,d) Pyrene	ND	ND	ND	ng/l	Quarterly
Isophorone	ND	ND	ND	ng/l	Quarterly
Isopropylbenzene				ug/l	Quarterly
Methoxychlor	ND	ND		ng/l	Quarterly
Methylene chloride	ND	ND	ND	ug/l	Quarterly
Methyl Bromide	ND			ug/l	Quarterly
Methyl-tert-Butyl Ether			ND	ug/l	Quarterly
Mirex	ND	ND		ng/l	Quarterly
Molybdenum				ng/l	Quarterly
Napthalene	ND	ND	ND	ug/l	Quarterly
n-Butylbenzene				ng/l	Quarterly
Nitrobenzene	ND	ND	ND	ug/l	Quarterly
N-Nitrosodimethylamine	ND	ND	ND	ng/l	Quarterly
N-Nitroso-di-n-propylamine	ND	ND	ND	ng/l	Quarterly
N-Nitrosodiphenylamine	ND	ND	ND	ng/l	Quarterly
n-Propylbenzene				ug/l	Quarterly
o-Xylene	ND			ug/l	Quarterly
p/m-Xylene	ND			ng/l	Quarterly
Pentachlorophenol	ND	ND	ND	ng/l	Quarterly
Perylene	ND			ng/l	Quarterly
Phenanthrene	ND	ND	ND	ng/l	Quarterly
Phenol	ND	ND	ND	ng/l	Quarterly
p-Isopropyltoluene				ug/l	Quarterly
Pyrene	ND	ND	ND	ng/l	Quarterly
Pyridine				ng/l	Quarterly
sec-Butylbenzene				ug/l	Quarterly
Styrene				ug/l	Quarterly
t-1,2-Dichloroethene	ND	ND	ND	ng/l	Quarterly
t-1,3-Dichloropropene	ND	ND		ug/l	Quarterly
tert-Butylbenzene				ng/l	Quarterly
Tetrachloroethane	ND	ND	ND	ug/l	Quarterly
Total Cyanide		ND		mg/l	Quarterly

Total Detectable PAHs		0.0		ng/l	Quarterly
Toulene	ND	ND	ND	ng/l	Quarterly
Toxaphene	ND	ND	ND	ng/l	Quarterly
Trans-nonachlor	ND	ND		ng/l	Quarterly
Trichloroethene	ND	ND	ND	ug/l	Quarterly
Trichlorofluoromethane			ND	ug/l	Quarterly
Vinyl Acetate				ug/l	Quarterly
Vinyl Chloride	ND	ND	ND	ug/l	Quarterly
Xylenes		ND	ND	ug/l	Quarterly

***Long Beach Generating Station
NPDES Monitoring Data
2004***

Long Beach Generating Station
NPDES Monitoring Data Summary 2004

2004

Long Beach Generation LLC
Long Beach Generating Station
2004

Discharge No. 001	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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Effluent

pH (Max)	8.0	7.9	8.0	8.0	8.0	8.0	7.9	7.9	8.0	8.0	8.0	8.1
pH (Min)	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.8	7.8	7.9	7.8	7.9
Flow (Max) MGD	131.4	133.0	132.5	131.3	88.8	109.0	191.2	190.6	190.7	167.3	107.9	140.0
Flow (Avg) MGD	68.1	63.8	90.7	67.1	62.7	75.0	108.5	82.3	96.6	86.2	76.5	78.7

Circ. Water Discharge

Temp (Max) °F	70	61	76	88	73	67	79	80	96	78	86	82
Temp (Min) °F	57	57	58	58	62	83	60	64	67	62	61	57
Heat Treat Temp °F												

Chlorine

Total - Avg (mg/l)	0.04	0.05	0.11	0.11	0.08	0.12	0.11	0.05	0.08	0.05	0.07	0.05
Total - Max (mg/l)	0.05	0.07	0.20	0.20	0.20	0.20	0.20	0.07	0.20	0.09	0.18	0.08
Total - Min (mg/l)	0.03	0.04	0.03	0.04	0.03	0.05	0.03	0.03	0.03	0.03	0.03	0.03
Free - Avg (mg/l)	0.04	0.04	0.11	0.10	0.06	0.10	0.07	0.04	0.07	0.04	0.06	0.04
Free - Max (mg/l)	0.05	0.06	0.18	0.18	0.15	0.18	0.13	0.07	0.16	0.05	0.16	0.07
Free - Min (mg/l)	0.03	0.03	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.03

Long Beach Generation LLC
Long Beach Generating Station
2004

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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Low Volume Waste

pH (Max)	7.7	7.7	7.8	7.8	7.7	7.9	7.7	8.2	7.9	7.9	7.9	8.2
pH (Min)	7.7	7.5	7.8	7.8	7.6	7.9	7.7	7.8	7.9	7.9	7.7	8.1
Total Suspended Solids - Max (lb/Day)	1.6	29.3	8.7	14.3	12.9	14.2	11.5	13.7	3.4	27.9	3.2	70.2
Total Suspended Solids - Avg (lb/Day)	1.5	27.7	8.0	12.1	7.5	14.1	10.7	12.0	3.2	24.8	3.2	36.4
Oil & Grease-Max (lb/day)	ND	4.0	ND	ND	ND	2.7	2.3	ND	ND	ND	ND	ND
Oil & Grease-Min (lb/day)	ND	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND
Flow Rate (MGD)	1.278	2.718	0.936	1.602	0.990	2.340	1.980	1.224	1.440	3.474	2.196	4.842

Long Beach Generating Station - NPDES Monitoring Data Summary 2004

F) RETENTION BASIN PRIORITY POLLUTANTS

Constituent & Date of Sample	Concentration	Units	Frequency of Analysis
	1st Qtr		

Date	8/10/04		
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Antimony	ND	ug/l	Quarterly
Arsenic	4.55	ug/l	Quarterly
Barium		ug/l	Quarterly
Beryllium	ND	ng/l	Quarterly
Cadmium	0.05	ug/l	Quarterly
Chromium (Total)	1.01	ug/l	Quarterly
Chromium, Hexavalent		ng/l	Quarterly
Cobalt			Quarterly
Copper	24	ug/l	Quarterly
Cyanide		ug/l	Quarterly
Lead	2.38	ug/l	Quarterly
Mercury	0.012	ug/l	Quarterly
Nickel	0.28	ug/l	Quarterly
Selenium	0.088	ug/l	Quarterly
Silver	ND	ug/l	Quarterly
Thallium	ND	ug/l	Quarterly
Zinc	14.4	ug/l	Quarterly

1,1,1,2-Tetrachloroethane	ND	ug/l	Quarterly
1,1,1-Trichloroethane	ND	ug/l	Quarterly
1,1,1-Trichloroethane	ND	ug/l	Quarterly
1,1,2-Trichloroethane	ND	ug/l	Quarterly
1,1-Dichloroethane	ND	ug/l	Quarterly
1,1-Dichloroethylene			
1,1-Dichloropropene		ug/l	Quarterly
1,2,3-Trichlorobenzene		ug/l	Quarterly
1,2,3-Trichloropropane		ug/l	Quarterly
1,2,4-Trichlorobenzene	ND	ug/l	Quarterly
1,2,4-Trimethylbenzene		ug/l	Quarterly
1,2-Dibromoethane		ug/l	Quarterly
1,2-Dichlorobenzene-1242		ug/l	Quarterly
1,2-Dichlorobenzene	ND	ug/l	Quarterly
1,2-Dichloroethane	ND	ug/l	Quarterly
1,2-Dichloropropane	ND	ug/l	Quarterly
1,2-Diphenylhydrazine	ND	ug/l	Quarterly
1,2-Trans-Dichloroethylene	ND	ug/l	Quarterly
1,3-Dichlorobenzene	ND	ug/l	Quarterly
1,3-Dichloropropylene			
1,3,5-Trimethylbenzene		ug/l	Quarterly
1,3-Dichloropropane		ug/l	Quarterly
1,4-Dichlorobenzene	ND	ug/l	Quarterly
1,2-Dibromo-3-Chloropropane		ng/l	Quarterly
1-Methylnaphthalene		ng/l	Quarterly
1-Methylphenanthrene		ng/l	Quarterly
2,2-Dichloropropane		ng/l	Quarterly
2,3,5-Trimethylnaphthalene		ng/l	Quarterly
2,3,7,8-TCDD	ND	ng/l	Quarterly
2,4,5-Trichlorophenol		ng/l	Quarterly
2,4,6-Trichlorophenol	ND	ng/l	Quarterly
2,4'-DDD	ND	ng/l	Quarterly
2,4'-DDE	ND	ng/l	Quarterly
2,4'-DDT	ND	ng/l	Quarterly
2,4-Dichlorophenol	ND	ng/l	Quarterly
2,4-Dimethylphenol	ND	ng/l	Quarterly
2,4-Dinitrophenol	ND	ng/l	Quarterly

F) RETENTION BASIN PRIORITY POLLUTANTS			
Constituent & Date of Sample	Concentration	Units	Frequency of Analysis
2,4-Dinitrotoulene	ND	ng/l	Quarterly
2,6 Dimethnapthalene		ng/l	Quarterly
2,6-Dinitrotoulene	ND	ng/l	Quarterly
2,4'-DDD		ng/l	Quarterly
2-Butanone		ug/l	Quarterly
2-Chlorethane		ng/l	Quarterly
2-Chloroethyl Vinyl Ether	ND	ng/l	Quarterly
2-Chloronaphthalene	ND	ng/l	Quarterly
2-Chlorophenol	ND	ug/l	Quarterly
2-Chlorotoluene		ug/l	Quarterly
2-Hexanone		ug/l	Quarterly
2-methyl-4,6 dinitrophenol	ND	ng/l	Quarterly
2-Methylnaphtalene		ng/l	Quarterly
2-Methylphenol		ng/l	Quarterly
2-Nitroaniline		ng/l	Quarterly
2-Nitrophenol	ND	ng/l	Quarterly
3,3'-Dichlorobenzidine	ND	ng/l	Quarterly
3,4-Methylphenol		ng/l	Quarterly
3-Methyl-4-Chlorophenol		ng/l	Quarterly
3-Nitroaniline		ng/l	Quarterly
4,4'-DDD	ND	ng/l	Quarterly
4,4'-DDE	ND	ng/l	Quarterly
4,4'DDT	ND	ng/l	Quarterly
4,6-Dinitro-2-Methylphenol		ng/l	Quarterly
4-Bromophenyl-Phenyl Ether	ND	ng/l	Quarterly
4-Chlorethane		ng/l	Quarterly
4-Chloro-3-Methylphenol	ND	ng/l	Quarterly
4-Chloroaniline		ng/l	Quarterly
4-Chlorophenyl-Phenyl Ether	ND	ng/l	Quarterly
4-Chlorotoluene		ug/l	Quarterly
4-Methyl-2-Pentanone		ug/l	Quarterly
4-Nitroaniline		ng/l	Quarterly
4-Nitrophenol	ND	ng/l	Quarterly
Acenaphthene	ND	ug/l	Quarterly
Acenaphthylene	ND	ng/l	Quarterly
Acetone		ug/l	Quarterly
Acrolein	ND	ng/l	Quarterly
Acrylonitrile	ND	ng/l	Quarterly
Aldrin	ND	ng/l	Quarterly
Alpha-BHC	ND	ng/l	Quarterly
Alpha-Endosulfan		ng/l	Quarterly
Analine		ng/l	Quarterly
Anthracene	ND	ng/l	Quarterly
Arcotor 1248	ND	ng/l	Quarterly
Arcotor 1254	ND	ng/l	Quarterly
Aroctor-1016	ND	ng/l	Quarterly
Aroctor-1221	ND	ng/l	Quarterly
Aroctor-1232	ND	ng/l	Quarterly
Aroctor-1242	ND	ng/l	Quarterly
Aroctor-1260	ND	ng/l	Quarterly
Aroctor-1262		ng/l	Quarterly
Azobenzene		ng/l	Quarterly
Benzene	ND	ug/l	Quarterly
Benzidine	ND	ng/l	Quarterly
Benzo (a) Anthracene	ND	ng/l	Quarterly
Benzo (a) Pyrene	ND	ng/l	Quarterly
Benzo (b) Fluoranthene	ND	ng/l	Quarterly
Benzo (e) Pyrene	ND	ng/l	Quarterly
Benzo (g,h,i) Perylene	ND	ng/l	Quarterly

F) RETENTION BASIN PRIORITY POLLUTANTS			
Constituent & Date of Sample	Concentration	Units	Frequency of Analysis
Benzo (k) Fluoranthene	ND	ng/l	Quarterly
Benzo (k) Pyrene		ng/l	Quarterly
Benzolelpyrene		ng/l	Quarterly
Benzonic Acid		ng/l	Quarterly
Benzyl Alcohol		ng/l	Quarterly
Beta-BHC	ND	ng/l	Quarterly
Beta-Endosulfan		ng/l	Quarterly
Biphenyl		ng/l	Quarterly
Bis (2-Ethylhexy) Phthalate	ND	ng/l	Quarterly
Bis(2-Chloroethyl) Ether	ND	ng/l	Quarterly
Bis(2-Chloroisopropyl) Ether	ND	ng/l	Quarterly
Bis(2-Ethylhexy) Phthalate	ND	ng/l	Quarterly
bisbenzyl phthalate	ND	ng/l	Quarterly
Bis-(Chloroethoxy) Methane	ND	ng/l	Quarterly
Bromobenzene		ug/l	Quarterly
Bromochloromethane	1.7	ug/l	Quarterly
Bromodichloromethane		ug/l	Quarterly
Bromoform	0.6	ug/l	Quarterly
Bromomethane	ND	ng/l	Quarterly
Butyl-Benzyl Phthalate	ND	ug/l	Quarterly
c-1,2-Dichloroethane	ND	ug/l	Quarterly
c-1,3-Dichloropropene	ND	ug/l	Quarterly
C-Xylene		ug/l	Quarterly
Carbon disulfide		ng/l	Quarterly
Carbon Tetrachloride	ND	ng/l	Quarterly
Chlordane	ND	ng/l	Quarterly
Chlordane-alpha	ND	ng/l	Quarterly
Chlorodane-gamma	ND	ng/l	Quarterly
Chlorethane	ND	ng/l	Quarterly
Chlorform	ND	ng/l	Quarterly
Chlormethane	ND	ug/l	Quarterly
Chlorobenzene	ND	ug/l	Quarterly
Chlorodibromo methane		ug/l	Quarterly
Chrysene-	ND	ng/l	Quarterly
Cyanide	ND	ng/l	Quarterly
Delta-BHC	ND	ng/l	Quarterly
Dibenz (a,h) Anthracene	ND	ng/l	Quarterly
Dibenzofuran		ng/l	Quarterly
Dibromochloromethane	ND	ug/l	Quarterly
Dibromomethane		ug/l	Quarterly
Dichlorobromo-methane	1.9	ug/l	Quarterly
Dichlorofluorethane	ND	ng/l	Quarterly
Dichlorodiflouromethane	ND	ng/l	Quarterly
Dieldrin	ND	ng/l	Quarterly
Diethy Phthalate	ND	ng/l	Quarterly
Dimethyl Phthalate	ND	ng/l	Quarterly
Di-n-Butyl Phthalate	ND	ng/l	Quarterly
Di-n-Octyl Phthalate-	ND	ng/l	Quarterly
Endosulfan I	ND	ng/l	Quarterly
Endosulfan II	ND	ng/l	Quarterly
Endosulfan Sulfate	ND	ng/l	Quarterly
Endrin	ND	ng/l	Quarterly
Endrin Aldehyde	ND	ng/l	Quarterly
Endrin Ketone		ng/l	Quarterly
EPA Method 8290-2,3,7,8 TCDD		ng/l	Quarterly
Ethylbenzene	ND	ug/l	Quarterly
Fluoranthene	9.3	ng/l	Quarterly
Fluorene	5.2	ng/l	Quarterly
Gamma-BHC	ND	ng/l	Quarterly

F) RETENTION BASIN PRIORITY POLLUTANTS			
Constituent & Date of Sample	Concentration	Units	Frequency of Analysis
Heptachlor	ND	ng/l	Quarterly
Heptachlor Epoxide	ND	ng/l	Quarterly
Hexachloro-1,3 Butadiene		ng/l	Quarterly
Hexachloralbutadiene	ND	ng/l	Quarterly
Hexachlorobenzene	ND	ng/l	Quarterly
Hexachlorocyclopentadiene	ND	ng/l	Quarterly
Hexachloroethane	ND	ng/l	Quarterly
Indeno (1,2,3-c,d) Pyrene	ND	ng/l	Quarterly
Isophorone	ND	ng/l	Quarterly
Isopropylbenzene		ug/l	Quarterly
Methoxychlor		ng/l	Quarterly
Methylene chloride	0.5	ug/l	Quarterly
Methyl Bromide	ND	ug/l	Quarterly
Methyl-tert-Butyl Ether	ND	ug/l	Quarterly
Mirex		ng/l	Quarterly
Molybdenum		ng/l	Quarterly
Napthalene	11.4	ug/l	Quarterly
n-Butylbenzene		ng/l	Quarterly
Nitrobenzene	ND	ug/l	Quarterly
N-Nitrosodimethylamine	ND	ng/l	Quarterly
N-Nitroso-di-n-propylamine	ND	ng/l	Quarterly
N-Nitrosodiphenylamine	ND	ng/l	Quarterly
n-Propylbenzene		ug/l	Quarterly
o-Xylene		ug/l	Quarterly
p/m-Xylene		ng/l	Quarterly
Pentachlorophenol	ND	ng/l	Quarterly
Perylene		ng/l	Quarterly
Phenanthrene	9.5	ng/l	Quarterly
Phenol	ND	ng/l	Quarterly
p-Isopropyltoluene		ug/l	Quarterly
Pyrene	ND	ng/l	Quarterly
Pyridine		ng/l	Quarterly
sec-Butylbenzene		ug/l	Quarterly
Styrene		ug/l	Quarterly
t-1,2-Dichloroethene	ND	ng/l	Quarterly
t-1,3-Dichloropropene	ND	ug/l	Quarterly
tert-Butylbenzene		ng/l	Quarterly
Tetrachloroethane	ND	ug/l	Quarterly
Total Cyanide		mg/l	Quarterly
Total Detectable PAHs	0.0	ng/l	Quarterly
Toulene	ND	ng/l	Quarterly
Toxaphene	ND	ng/l	Quarterly
Trans-nonachlor		ng/l	Quarterly
Trichloroethene	ND	ug/l	Quarterly
Trichlorofluoromethane	ND	ug/l	Quarterly
Vinyl Acetate		ug/l	Quarterly
Vinyl Chloride	ND	ug/l	Quarterly
Xylenes	ND	ug/l	Quarterly

Requested Permit Changes

**EPA FORM 2C
ATTACHMENT 3**

Requested Changes to the Permit

Long Beach Generating Station requests the Regional Board change the following findings as defined below to the forthcoming 2006 Order.

Previous Schematic of Water Flow

The existing permit (CA0001171) Figure4, Schematic Diagram of Wastewater Flow details the facility with Generating Units 1-9 in operation. As described in other sections of this application, Generating Units 1-9 were permanently retired effective January 1, 2005. The following list describes equipment that is out of service, and therefore, no longer applicable to the wastewater flow diagram:

- #8 Hotwell Overboard (0.001 MGD)
- #9 Hotwell Overboard (0.001 MGD)
- Boiler Blowdown (0.3 MGD)
- Softener Regeneration (0.05 MGD)
- Chemical Laboratory Drains

Figure 4 in Section 3.0 accurately describes the current operations of the facility.

Request for Alternative Discharge

Long Beach Generation LLC (LBG) permanently retired the existing power generating equipment at the Long Beach Generating Station (LBGS) effective January 1, 2005. LBG notified the California Regional Water Quality Control Board, Los Angeles Region of this change in operating status by letter on January 7, 2005 (See Section 9.0). The January 7, 2005 letter requested modification to the permitted method of wastewater discharge at the facility. The request discussed the characteristics of the normal operating discharge and sample results from grab samples collected from the retention basin where low volume waste streams are accumulated and pumped into the effluent of the once through cooling water system. The comparison of the results from the basin grab sample to existing monthly NPDES discharge limits showed that only copper could potentially exceed the existing NPDES discharge limits of 6.2 µg/L. Ceasing operation of the once-through cooling system would have the beneficial effect of decreasing the volume of water discharged to the Back Channel in the Harbor, and significantly decrease the electrical energy consumption required to power the once-through cooling system pumps, and will eliminate the need for chlorine injection into the once-through

cooling system which will eliminate total residual chlorine mass from the effluent. The letter also described the additional beneficial effects associated with the shut down of the system by eliminating the potential for impingement and entrainment of marine organisms.

In preparing this application, LBG performed 24-hour composite sampling from the Intake and Outfall 001 structures in compliance with the EPA NPDES requirements during June 2005. The June 2005 Outfall 001 sampling is representative of the existing operations (See Section 3.0, Figure 4). The Form 2C results for existing operations are presented in Table 1 of this section. The June 2005 sampling of the existing operations and the preparation of this permit renewal application was performed to provide the RWQCB with a complete application for renewal of the NPDES Permit Number CA0001171. However, the existing NPDES permit configuration is not the most desirable utilization of resources considering the current site operations and conditions. LBG is actively participating in discussions with the RWQCB about alternative discharge options.

During discussions between LBG and the RWQCB about alternative discharge methods for groundwater at the site, the RWQCB requested LBG inquire about discharging the low volume waste stream to the sanitary sewer system. The sanitary sewer system on Terminal Island is conveyed through a treatment system operated by the Port of Long Beach on Terminal Island before being directed to the City of Los Angeles Bureau of Sanitation sewer treatment plant. LBG held meetings with the Port of Long Beach engineering department on July 21, 2005, to discuss the possibility of routing the low volume waste stream into the existing sewer connection, and inquired with the City of Los Angeles Bureau of Sanitation about accepting the volume flow and water quality from the site (See Related Correspondence in Section 9.0).

The Port of Long Beach engineering department indicated during the meeting that the sewer piping from the connection point on site to the Terminal Island treatment facility was insufficient to carry the requested flow. The City of Los Angeles Bureau of Sanitation also concurred with that assessment. Letters were recently submitted to the Port of Long Beach and the City of Los Angeles Bureau of Sanitation formally requesting sewer discharge capacity for the LBGS low volume waste. Responses are expected that indicate this option is not feasible based on the verbal discussions.

In April 2005, LBG temporarily shutdown the once-through cooling system for maintenance and repairs (Section 9.0, RWQCB Correspondence dated January 7, 2005). During the temporary shutdown (July 11, 2005 to August 4, 2005), all the low volume wastewater for the retention basin was pumped via an alternate discharge pipe to the Outfall 001 discharge point. This arrangement simulated the proposed alternative discharge that LBGS seeks to have approved by the Regional Water Board. The low volume wastewater, as currently permitted, is comprised of the following waste streams:

- Yard drains (Groundwater seepage and intermittent stormwater)
- Plant No.2 Sumps (Groundwater seepage and leaks from once through cooling water system)
- Plant No. 2 Well Point Dewatering System (Groundwater)
- Tank Farm Well Point Dewatering System (Groundwater and intermittent stormwater)

During the temporary shutdown, LBGS performed 24-hour composite sampling from the alternate discharge from Outfall 001. The alternate discharge sampling performed from July 18 to 19, of 2005, is considered characteristic of the discharge anticipated by the requested changes to the existing permitted discharge (see Figure 5). The Form 2C results for the requested alternate discharge are presented in Attachment B of this section. The results of the analysis show that the proposed discharge characteristics do not exceed any of the existing NPDES Permit limits, or any of the NPDES Form 2C screening limits for industrial discharge.

LBG also evaluated the groundwater well point streams entering into the retention basin for General NPDES permit options. The groundwater well point streams are comprised of groundwater from the LBGS Plant No. 2 well point system and the Pacific Terminals well point and stormwater collection system. LBG groundwater sampling followed the Regional Water Board's adopted permit for Discharges of Groundwater From Construction and Project Dewatering To Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties, Attachment A, Screening Levels For General Permits (General NPDES Permit No. CAG994004, Order No R4-2003-0111). Water sampling was performed on July 22, 2005. The results of the initial and subsequent sampling events are provided in this section as Table 4 Low Volume Waste Stream Sampling Summary Results. The results indicate that, with exception of Total Petroleum Hydrocarbons (TPH) (diesel range only), the constituents in the groundwater are within the General Permit's "Attachment A" screening levels. The Attachment A screening level for TPH is 100 µg/L. TPH as Diesel results ranged from 210 µg/L in the Plant No. 2 well point system to 670 µg/L in the Pacific Terminal discharge.

Due to the identification of TPH as diesel in the low volume wastewater stream, LBG conducted additional sampling and found the TPH as diesel levels to be above the General Permit screening levels at the seawater intake and outfall as well. . While each of these results may exceed the Groundwater General Permit screening thresholds, they do not exceed any discharge limits contained in the LBGS NPDES Permit No. CA 0001171, Order No. 01-0179. LBG does not have any diesel storage on site that could contribute to the TPH in groundwater or harbor water and is unaware of the source of the TPH.

New Schematic Diagram of Water Flow

Long Beach Generation LLC plans to shutdown the once through cooling system currently in operation at Plant No. 2. The proposed discharge will operate under the new configuration described in Figure 5 to the EPA Form 2C showing the "New Schematic Diagram of Water Flow". The major changes from the existing operations (Section 3.0, Figure 4) to the proposed operations (Section 4.0, Figure 5) will be:

- Delete the Unit 8 & 9 Intake (261 MDG)
- Delete the Unit 8 & 9 Circ. Water Condensers
- Delete the Unit 8 & 9 BCW Heat Exchangers
- Delete the Chlorine Injection

The proposed changes will have beneficial effect of reducing the volume of discharge, reduce the consumption of electrical energy, eliminating the injection of chlorine, and eliminating the potential for impingement and entrainment at the intake structure.

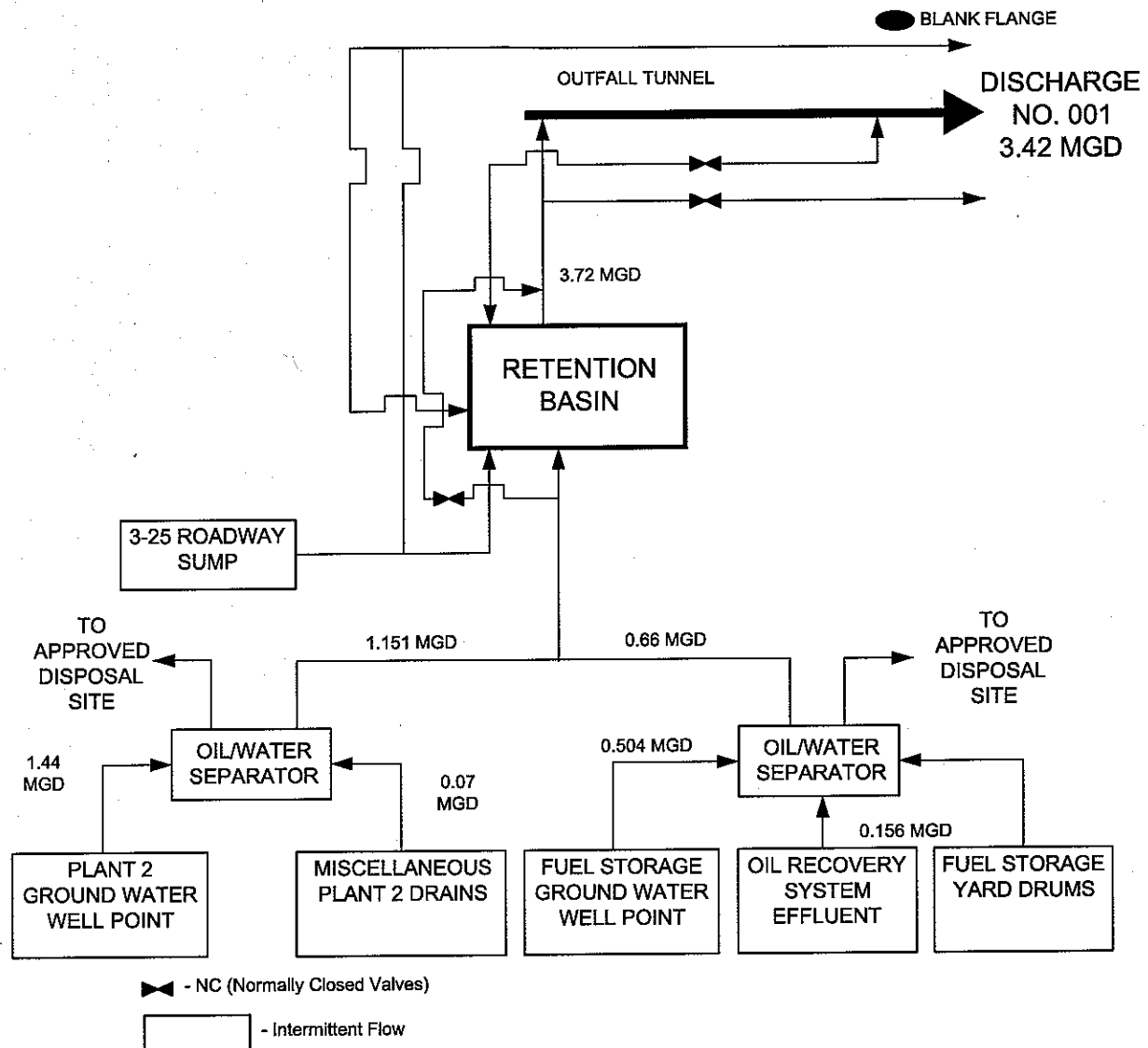


FIGURE-5
NEW SCHEMATIC DIAGRAM OF WATER FLOW
DIRECT DISCHARGE OF LOW VOLUME WASTE STREAMS

TABLE 3
DIRECT DISCHARGE LOW VOLUME WASTE STREAM
LONG BEACH GENERATING STATION
NPDES PERMIT (CA0001171) RENEWAL APPLICATION (10/12/05)
EPA NPDES Application Form 2C - Section V, Part A

EPA ID No. CAR 000 037 705

V. Intake and Effluent Characteristics										Outfall No. 001
Part A.										
Pollutant	Effluent						Intake			
	Maximum Daily Value		Maximum 30 Day Value		Long Term Avg Value		Units		Long Term Avg Value	
	Conc	Mass	Conc	Mass	Conc	Mass	Conc	Mass	Conc	Mass
a. Biochemical Oxygen Demand	12	0.04					mg/L	tons	--	--
b. Chemical Oxygen Demand	230	0.80					mg/L	tons	--	--
c. Total Organic Carbon	22	0.08					mg/L	tons	--	--
d. Total Suspended Solids	48.4	0.17					mg/L	tons	--	--
e. Ammonia (as N)	1.9	0.01					mg/L	tons	--	--
f. Flow	Value=0.8						MGD			
g. Temperature (winter)	Intake Value = 14.1		Value = 20.3		Value = 19.7		Deg - C		Value = 16.1	
h. Temperature (summer)	Discharge Value = 17.6		Value = 26.1		Value = 26		Deg - C		Value = 22.1	
i. pH	Min=7.76	Max=7.93	Min = NA	Max = NA	N/A		Standard Units		Min=7.56	Max=7.82
										9
										365
										90
										92
										9

Note:

1) "<" indicates that the pollutant concentration was not detected. For these pollutants, the detection limit is reported in the concentration column. For the purpose of calculating mass emissions for this table, the detection limit was utilized as the concentration where the pollutant was not detected. Such substitution should not be used for the purpose of determining compliance with effluent limits.

2) Mass emissions were calculated using the averaged flow recorded during the month of July 2005. (i.e. 0.830903 MGD).

3) Temperature information is based upon daily average temperatures from:

* Summer - July 1 to September 30, 2004

* Winter - January 1 to March 31, 2004

TABLE 3
DIRECT DISCHARGE LOW VOLUME WASTE STREAM
LONG BEACH GENERATING STATION
NPDES PERMIT (CA0001171) RENEWAL APPLICATION (10/12/05)
EPA NPDES Application Form 2C - Section V, Part B

EPA ID No. CAT 000 037 705

V. Intake and Effluent Characteristics												Outfall No. 001	
Part B.													
Pollutant	CAS No.	Mark X		Effluent				Intake					
		Believed Present	Believed Absent	Maximum Daily Value	Maximum 30 Day Value	Long Term Avg Value	No. of Analyses	Conc	Mass	Long Term Avg Value	No. of Analyses		
				Conc	Mass	Conc	Mass	Conc	Mass	Conc	Mass		
a. Bromide	24959-67-3	X		1.03	0.33	1.03	1	mg/L	tons	--	--		
b. Chlorine, Total Residual		X		<0.03	<0.03	--	--	mg/L	lbs	--	--		
c. Color		X		40	N/A	--	--	color units	N/A	--	--		
d. Fecal Coliform		X		20	N/A	--	--	MPN/100ml	N/A	--	--		
e. Fluoride	16984-48-8	X		0.79	5.47	0.79	1	mg/L	lbs	--	--		
f. Nitrate-Nitrite (as N)		X		<1.0	6.93	<1	1	mg/L	lbs	--	--		
g. Nitrogen, Total Organic (as N)		X		3.8	26.32	3.8	1	mg/L	lbs	--	--		
h. Oil and Grease		X		1.5	10.39	--	9	mg/L	lbs	--	--		
i. Phosphorus, (as P) Total	7723-14-0	X		0.55	3.81	0.55	1	mg/L	lbs	--	--		
j(1). Radioactivity: Alpha, Total		X		224 +/- 56	--	224 +/- 56	1	pCi/L	tons	--	--		
j(2). Radioactivity: Beta, Total		X		0.64 +/- 0.18	--	0.64 +/- 0.18	1	pCi/L	tons	--	--		
k. Radioactivity: Radium, Total		X		0.10 +/- 0.18	--	0.10 +/- 0.18	1	pCi/L	tons	--	--		
l. Radioactivity: Radium 226, Total		X		0.10 +/- 0.18	--	0.10 +/- 0.18	1	pCi/L	tons	--	--		
m. Sulfate (SO4)	14808-79-8	X		1480	468.72	1480	1	mg/L	tons	--	--		
n. Sulfite (as S)		X		<0.02	0.14	<0.02	1	mg/L	lbs	--	--		
o. Sulfite (as SO3)	14265-45-3	X		<1.0	6.93	<1	1	mg/L	lbs	--	--		
p. Surfactants		X		0.23	1.59	0.23	1	mg/L	lbs	--	--		
q. Aluminum, Total	7429-90-5	X		9.43	5.97	9.43	1	ug/L	lbs	--	--		
r. Barium, Total	7440-39-3	X		<0.1	0.06	<0.1	1	ug/L	lbs	--	--		
s. Boron, Total	7440-42-8	X		5.61	1.78	5.61	1	mg/L	tons	--	--		
t. Cobalt, Total	7440-48-4	X		<0.005	0.00	<0.005	1	ug/L	tons	--	--		
u. Iron, Total	7439-89-6	X		340	215.36	340	1	ug/L	tons	--	--		
v. Magnesium, Total	7439-95-4	X		864	273.63	864	1	ug/L	tons	--	--		
w. Molybdenum, Total	7439-98-7	X		3.49	2.21	3.49	1	ug/L	tons	--	--		
x. Manganese, Total	7439-96-5	X		681	431.35	681	1	ug/L	tons	--	--		
y. Tin, Total	7440-31-5	X		0.024	0.02	0.024	1	ug/L	tons	--	--		
z. Titanium, Total	7440-32-6	X		0.73	0.46	0.73	1	ug/L	tons	--	--		

Note:
 1) "<" indicates that the pollutant concentration was not detected. For these pollutants, the detection limit is reported in the concentration column. For the purpose of calculating mass emissions for this table, the detection limit was utilized as the concentration where the pollutant was not detected. Such substitution should not be used for the purpose of determining compliance with effluent limits.

2) Mass emissions were calculated using the flow during the actual sampling period (i.e. grab samples - 0.830903 MGD)

TABLE 3
DIRECT DISCHARGE OF LOW VOLUME WASTE STREAM
LONG BEACH GENERATING STATION
NPDES PERMIT (CA0001171) RENEWAL APPLICATION (10/12/05)
EPA NPDES Application Form 2C - Section V, Part C

V. Intake and Effluent Characteristics															Outfall No. 001
Part C.															
Pollutant	CAS No.	Mark X		Testing Required	Believed Present	Believed Absent	Effluent				Intake				
		Maximum Daily Value	Maximum 30 Day Value				Long Term Avg Value	Units	Long Term Avg Value	Conc	Mass	No. of Analyses			
Metals, Cyanide, and Total Phenols															
Total Antimony	7440-36-0	X		X			0.07	0.04		ug/l		lbs		NA	
Total Arsenic	7440-38-2	X		X			5.12	3.24		ug/l		lbs		NA	
Total Beryllium	7440-41-7	X		X			<0.005	0.0032		ug/l		lbs		NA	
Total Cadmium	7440-43-9	X		X			0.053	0.03		ug/l		lbs		NA	
Total Chromium	7440-47-3	X		X			0.255	0.16		ug/l		lbs		NA	
Total Copper	7440-50-8	X		X			2.66	1.68		ug/l		lbs		NA	
Total Lead	7439-92-1	X		X			0.197	0.12		ug/l		lbs		NA	
Total Mercury	7439-97-6	X		X			0.00868	0.01		ug/l		lbs		NA	
Total Nickel	7440-02-0	X		X			0.73	0.46		ug/l		lbs		NA	
Total Selenium	7782-49-2	X		X			<0.01	0.01		ug/l		lbs		NA	
Total Silver	7440-22-4	X		X			<0.005	0.0032		ug/l		lbs		NA	
Total Thallium	7440-28-0	X		X			<0.005	0.0032		ug/l		lbs		NA	
Total Zinc	7440-66-6	X		X			11.7	7.41		ug/l		lbs		NA	
Total Cyanide	57-12-5	X		X			--	--		ug/l		lbs		NA	
Total Phenols		X		X			--	--		ug/l		lbs		NA	
Dioxin															
2,3,7,8-Tetrachlorodibenzo-P-Dioxin	1746-01-6				X		<2.5	--		pg/l		lbs		NA	
GS/MS Fraction - Volatile Compounds															
1V acrolein	107-02-8	X		X			<12	7.60		ug/l		lbs		NA	
2V acrylonitrile	107-13-1	X		X			<10	6.33		ug/l		lbs		NA	
3V benzene	71-43-2	X		X			<0.3	0.19		ug/l		lbs		NA	
4V bis (Chloromethyl) Ether	542-88-1	N/A*					<1.0	0.63		ug/l		lbs		NA	
5V bromoform	75-25-2	X		X			0.72	0.46		ug/l		lbs		NA	
6V carbon tetrachloride	56-23-5	X		X			<0.3	0.19		ug/l		lbs		NA	
7V chlorobenzene	108-90-7	X		X			<0.3	0.19		ug/l		lbs		NA	
8V chlorodibromomethane	124-48-1	X		X			<0.4	0.25		ug/l		lbs		NA	
9V chloroethane	75-00-3	X		X			<0.3	0.19		ug/l		lbs		NA	
10V 2-chloroethylvinyl ether	110-75-8	X		X			<2.0	1.27		ug/l		lbs		NA	
11V chloroform	67-68-3	X		X			0.71	0.45		ug/l		lbs		NA	
12V dichlorobromomethane	75-27-4	X		X			0.46	0.29		ug/l		lbs		NA	
13V dichlorodifluoromethane	75-71-8	N/A*					<0.4	0.25		ug/l		lbs		NA	
14V 1,1-dichloroethane	75-34-3	X		X			<0.2	0.13		ug/l		lbs		NA	
15V 1,2-dichloroethane	107-06-2	X		X			<0.4	0.25		ug/l		lbs		NA	
16V 1,1-dichloroethylene	75-35-4	X		X			<0.3	0.19		ug/l		lbs		NA	
17V 1,2-dichloropropane	78-87-5	X		X			<0.3	0.19		ug/l		lbs		NA	
18V 1,3-dichloropropylene	542-75-5	X		X			<0.5	0.32		ug/l		lbs		NA	
19V ethylbenzene	100-41-4	X		X			<0.2	0.13		ug/l		lbs		NA	
20V methyl bromide	74-83-9	X		X			<1.0	0.63		ug/l		lbs		NA	
21V methyl chloride	74-87-3	X		X			<0.3	0.19		ug/l		lbs		NA	
22V methylene chloride	75-09-2	X		X			<0.3	0.19		ug/l		lbs		NA	
23V 1,1,2-trichloroethane	79-34-5	X		X			<0.4	0.25		ug/l		lbs		NA	
24V tetrachloroethylene	127-18-4	X		X			<0.3	0.19		ug/l		lbs		NA	
25V toluene	108-88-3	X		X			<0.3	0.19		ug/l		lbs		NA	
26V 1,2-trans-dichloroethylene	156-60-5	X		X			<0.3	0.19		ug/l		lbs		NA	
27V 1,1,1-trichloroethane	71-55-6	X		X			<0.2	0.13		ug/l		lbs		NA	
28V 1,1,2-trichloroethane	79-00-5	X		X			<0.3	0.19		ug/l		lbs		NA	
29V trichloroethylene	79-01-6	X		X			<0.3	0.19		ug/l		lbs		NA	
30V trichlorofluoromethane	75-89-4	N/A*					<0.3	0.19		ug/l		lbs		NA	
31V vinyl chloride	75-01-4	X		X			<0.3	0.19		ug/l		lbs		NA	
32V tributyltin (Note 3)		X		X			--	--		ug/l		lbs		NA	
GS/MS Fraction - Acid Compounds															
1A 2-chlorophenol	95-57-8	X		X			<3.0	1.90		ug/l		lbs		NA	
2A 2,4-dichlorophenol	120-83-2	X		X			<5.0	3.17		ug/l		lbs		NA	
3A 2,4-dimethylphenol	105-67-9	X		X			<5.0	3.17		ug/l		lbs		NA	
4A 4,6-dinitro-o-cresol	534-52-1	X		X			<10	6.33		ug/l		lbs		NA	
5A 2,4-dinitrophenol	51-28-5	X		X			<15	9.50		ug/l		lbs		NA	
6A 2-nitrophenol	88-75-5	X		X			<4.0	2.53		ug/l		lbs		NA	
7A 4-nitrophenol	100-02-7	X		X			<10	6.33		ug/l		lbs		NA	
8A p-chloro-m-cresol	59-50-7	X		X			<2.0	1.27		ug/l		lbs		NA	

TABLE 3
DIRECT DISCHARGE OF LOW VOLUME WASTE STREAM
LONG BEACH GENERATING STATION
NPDES PERMIT (CA0001171) RENEWAL APPLICATION (10/12/05)
EPA NPDES Application Form 20 - Section V, Part C

V. Intake and Effluent Characteristics														Outfall No. 001	
Part C.															
Pollutant	CAS No.	Testing Required	Mark X Believed Present	Believed Absent	Effluent			Long Term Avg Value			Units		No. of Analyses	Intake	
					Maximum Daily Value	Maximum 30 Day Value	Conc	Mass	Conc	Mass	Conc	Mass		Long Term Avg Value	No. of Analyses
					Conc	Conc					ug/l	lbs		Conc	Mass
9A pentachlorophenol	87-86-5	X			<10	6.33					ug/l	lbs	1	--	--
10A phenol	105-95-2	X			<2.0	1.27					ug/l	lbs	1	--	--
11A 2,4,6-trichlorophenol	88-06-2	X			<2.0	1.27					ug/l	lbs	1	--	--
GS/MS Fraction - Base/Neutral Compounds															
1B acenaphthene	83-32-9	X			<3.0	1.90					ug/l	lbs	1	--	NA
2B acenaphthylene	206-96-8	X			<2.0	1.27					ug/l	lbs	1	--	NA
3B anthracene	120-12-7	X			<10	6.33					ug/l	lbs	1	--	NA
4B benzofluorene	92-87-5	X			<13	8.23					ug/l	lbs	1	--	NA
5B benzo(a)anthracene	56-55-3	X			<2.0	1.27					ug/l	lbs	1	--	NA
6B benzo(a)pyrene	50-32-8	X			<2.0	1.27					ug/l	lbs	1	--	NA
7B 3,4-benzofluoranthene	205-99-2	X			<5.0	3.17					ug/l	lbs	1	--	NA
8B benzo(k)fluoranthene	191-24-2	X			<2.0	1.27					ug/l	lbs	1	--	NA
9B benzo(b)fluoranthene	207-08-9	X			<5.0	3.17					ug/l	lbs	1	--	NA
10B bis(2-chloroethoxy)methane	111-91-1	X			<2.0	1.27					ug/l	lbs	1	--	NA
11B bis(2-chloroethyl)ether	111-44-4	X			<3.0	1.90					ug/l	lbs	1	--	NA
12B bis(2-chloroisopropyl)ether	102-60-1	X			<4.0	2.53					ug/l	lbs	1	--	NA
13B bis(2-ethylhexyl)phthalate	117-81-7	X			<4.0	2.53					ug/l	lbs	1	--	NA
14B 4-bromophenyl phenyl ether	101-55-3	X			<2.0	1.27					ug/l	lbs	1	--	NA
15B butylbenzyl phthalate	85-68-7	X			<4.0	2.53					ug/l	lbs	1	--	NA
16B 2-chloronaphthalene	91-58-7	X			<3.0	1.90					ug/l	lbs	1	--	NA
17B 4-chlorophenyl phenyl ether	7005-72-3	X			<2.0	1.27					ug/l	lbs	1	--	NA
18B chrysene	218-01-9	X			<2.0	1.27					ug/l	lbs	1	--	NA
19B dibenz(a,h)anthracene	53-70-3	X			<5.0	3.17					ug/l	lbs	1	--	NA
20B 1,2-dichlorobenzene	95-50-1	X			<3.0	1.90					ug/l	lbs	1	--	NA
21B 1,3-dichlorobenzene	541-73-1	X			<3.0	1.90					ug/l	lbs	1	--	NA
22B 1,4-dichlorobenzene	106-46-7	X			<3.0	1.90					ug/l	lbs	1	--	NA
23B 3,3-dichlorobenzidine	91-94-1	X			<5.0	3.17					ug/l	lbs	1	--	NA
24B diethyl phthalate	84-66-2	X			<2.0	1.27					ug/l	lbs	1	--	NA
25B dimethyl phthalate	131-11-3	X			<2.0	1.27					ug/l	lbs	1	--	NA
26B di-n-butyl phthalate	84-74-2	X			<2.0	1.27					ug/l	lbs	1	--	NA
27B 2,4-dinitrotoluene	121-14-2	X			<2.0	1.27					ug/l	lbs	1	--	NA
28B 2,6-dinitrotoluene	608-20-2	X			<2.0	1.27					ug/l	lbs	1	--	NA
29B di-n-octyl phthalate	117-84-0	X			<4.0	2.53					ug/l	lbs	1	--	NA
30B 1,2-diphenylhydrazine (as azobenzene)	122-68-7	X			<2.0	1.27					ug/l	lbs	1	--	NA
31B fluoranthene	206-44-0	X			<2.0	1.27					ug/l	lbs	1	--	NA
32B fluorene	86-73-7	X			<2.0	1.27					ug/l	lbs	1	--	NA
33B hexachlorobenzene	118-74-1	X			<5.0	3.17					ug/l	lbs	1	--	NA
34B hexachlorobutadiene	87-68-3	X			<2.0	1.27					ug/l	lbs	1	--	NA
35B hexachlorocyclopentadiene	77-47-4	X			<6.0	3.80					ug/l	lbs	1	--	NA
36B hexachlorocyclohexane	67-72-1	X			<3.0	1.90					ug/l	lbs	1	--	NA
37B indeno(1,2,3-cd)pyrene	193-39-5	X			<2.0	1.27					ug/l	lbs	1	--	NA
38B isophthalene	78-59-1	X			<3.0	1.90					ug/l	lbs	1	--	NA
39B naphthalene	91-20-3	X			<3.0	1.90					ug/l	lbs	1	--	NA
40B nitrobenzene	98-95-3	X			<5.0	3.17					ug/l	lbs	1	--	NA
41B N-nitrosodimethylamine	82-75-9	X			<7.0	4.43					ug/l	lbs	1	--	NA
42B N-nitrosodipropylamine	621-64-7	X			<4.0	2.53					ug/l	lbs	1	--	NA
43B N-nitrosodiphenylamine	86-30-6	X			<2.0	1.27					ug/l	lbs	1	--	NA
44B phenanthrene	85-01-8	X			<2.0	1.27					ug/l	lbs	1	--	NA
45B pyrene	129-00-0	X			<3.0	1.90					ug/l	lbs	1	--	NA
46B 1,2,4-trichlorobenzene	120-82-1	X			<5.0	3.17					ug/l	lbs	1	--	NA
GS/MS Fraction - Pesticide Compounds															
1P aldrin	309-00-2			X	<0.10	0.06					ug/l	lbs	1	--	NA
2P alpha-BHC	319-84-6			X	<0.10	0.06					ug/l	lbs	1	--	NA
3P beta-BHC	319-85-7			X	<0.10	0.06					ug/l	lbs	1	--	NA
4P gamma-BHC	58-89-9			X	<0.10	0.06					ug/l	lbs	1	--	NA
5P delta-BHC	319-86-8			X	<0.10	0.06					ug/l	lbs	1	--	NA
6P chlordane	57-74-9			X	<1.0	0.63					ug/l	lbs	1	--	NA
7P 4,4'-DDT	50-28-3			X	<0.10	0.06					ug/l	lbs	1	--	NA
8P 4,4'-DDE	72-55-9			X	<0.10	0.06					ug/l	lbs	1	--	NA
9P 4,4'-DDD	72-54-8			X	<0.10	0.06					ug/l	lbs	1	--	NA

TABLE 3
DIRECT DISCHARGE OF LOW VOLUME WASTE STREAM
LONG BEACH GENERATING STATION
NPDES PERMIT (CA0001171) RENEWAL APPLICATION (10/12/05)
EPA NPDES Application Form 2C - Section V, Part C

EPA ID No. CAR 000 037 705

V. Intake and Effluent Characteristics														Outfall No. 001
Part C.														
Pollutant	CAS No.	Mark X		Effluent						Intake				
		Testing Required	Believed Present	Believed Absent	Maximum Daily Value		Maximum 30 Day Value		Long Term Avg Value		No. of Analyses	Units		No. of Analyses
					Conc	Mass	Conc	Mass	Conc	Mass		Conc	Mass	
10P dieldrin	60-57-1			X	<0.10	0.06					1	ug/l	lbs	NA
11P alpha-endosulfan	115-29-7			X	<0.10	0.06					1	ug/l	lbs	NA
12P beta-endosulfan	115-29-7			X	<0.10	0.06					1	ug/l	lbs	NA
13P endosulfan sulfate	1031-07-8			X	<0.10	0.06					1	ug/l	lbs	NA
14P endrin	72-20-8			X	<0.10	0.06					1	ug/l	lbs	NA
15P endrin sidehyde	7421-93-4			X	<0.10	0.06					1	ug/l	lbs	NA
16P heptachlor	76-44-8			X	<0.10	0.06					1	ug/l	lbs	NA
17P heptachlor epoxide	1024-57-3			X	<0.10	0.06					1	ug/l	lbs	NA
18P PCB-1242	53469-21-9			X	<1.0	0.63					1	ug/l	lbs	NA
19P PCB-1254	11097-69-1			X	<1.0	0.63					1	ug/l	lbs	NA
20P PCB-1221	11104-28-2			X	<1.0	0.63					1	ug/l	lbs	NA
21P PCB-1232	11141-16-5			X	<1.0	0.63					1	ug/l	lbs	NA
22P PCB-1248	12672-29-6			X	<1.0	0.63					1	ug/l	lbs	NA
23P PCB-1260	11096-82-5			X	<1.0	0.63					1	ug/l	lbs	NA
24P PCB-1016	12874-11-2			X	<1.0	0.63					1	ug/l	lbs	NA
25P toxaphene	8001-35-2			X	<2.0	1.27					1	ug/l	lbs	NA

N/A* - This pollutant has been deleted from Table II in 40 CFR 122.21, therefore testing is not required.

1) * indicates that the pollutant concentration was not detected. For these pollutants, the detection limit is reported in the concentration column. For the purpose of calculating mass emissions for this table, the detection limit was utilized as the concentration where the pollutant was not detected. Such substitution should not be used for the purpose of determining compliance with effluent limits.

2) Mass emissions were calculated using the flow during the actual sampling period:
 * grab samples - 0.830903 MGD

3) This chemical is being tested for per Table B of the 2001 California Ocean Plan.

Table 4

Low Volume Waste Stream Sampling Summary
General NPDES Permit CAG994004
Attachment A Screening Limits

Lone Beach Generating Station

Pollutant	Units	NPDES General Permit Attachment A	Retention Basin	Plant 2 Wellpoint System	Tank Farm Wellpoint System	Plant 2 Wellpoint System	After Treatment	Tank Farm Wellpoint System
	Conc.		07/22/2005 8:10	07/22/2005 7:55	07/22/2005 7:15	09/26/2005 10:00	09/26/2005 10:15	09/26/2005 10:15
Biochemical Oxygen Demand (BOD)	mg/L	--	2.0	--	--	--	--	--
Chemical Oxygen Demand (COD)	mg/L	--	--	<1.4	<1.4	--	--	--
Total Organic Carbon (TOC)	mg/L	--	--	--	--	--	--	--
Total Suspended Solids (TSS)	mg/L	--	--	--	--	--	--	--
Ammonia (as N)	mg/L	--	--	--	--	--	--	--
Flow	MGD	--	--	--	--	--	--	--
Temperature	°C	--	--	--	--	--	--	--
pH	pH unit	--	--	--	--	--	--	--
METALS, CYANIDE AND TOTAL PHENOLS								
Arsimony, Total	µg/L	4300	--	0.17	0.195	--	--	--
Arsenic, Total	µg/L	36	--	2.87	7.09	--	--	--
Barium, Total	µg/L	--	--	<0.005	<0.005	--	--	--
Cadmium, Total	µg/L	9.4	--	0.032	0.008	--	--	--
Chromium, Total	µg/L	--	--	0.570	0.375	--	--	--
Copper, Total	µg/L	3.7	--	1.17	0.346	--	--	--
Lead, Total	µg/L	8.5	--	0.541	0.141	--	--	--
Mercury, Total	µg/L	0.051	--	0.0016	<0.00005	--	--	--
Nickel, Total	µg/L	8.3	--	0.378	0.386	--	--	--
Selenium, Total	µg/L	71	--	0.069	<0.01	--	--	--
Silver, Total	µg/L	2.2	--	<0.005	<0.005	--	--	--
Thallium, Total	µg/L	6.3	--	<0.005	<0.005	--	--	--
Vanadium, Total	µg/L	--	--	--	--	--	--	--
Zinc, Total	µg/L	86	--	78.9	3.08	--	--	--
Cyanide, Total	µg/L	--	<0.05	--	--	--	--	--
Cyanide, Amenable	µg/L	--	<0.05	--	--	--	--	--
Phenols, Total	µg/L	--	--	--	--	--	--	--
PHENOLS								
2,3,7,8-TCDD	µg/L	1.3 x 10 ⁻⁸	--	--	--	--	--	--
VOLATILE COMPOUNDS								
1,1-Dichloroethane	µg/L	5	--	<0.2	<0.2	--	--	--
1,1-Dichloroethene	µg/L	--	--	--	--	--	--	--
1,1-Dichloroethylene	µg/L	3.2	--	<0.3	<0.3	--	--	--
1,1,1-Trichloroethane	µg/L	200	--	<0.2	<0.2	--	--	--
1,1,1,2-Tetrachloroethane	µg/L	--	--	--	--	--	--	--
1,1,2-Trichloroethane	µg/L	42	--	<0.3	<0.3	--	--	--
1,1,2,2-Tetrachloroethane	µg/L	1	--	0.4	<0.4	--	--	--
1,2-Dibromoethane	µg/L	--	--	--	--	--	--	--
1,2-Dichloroethane	µg/L	99	--	<0.4	<0.4	--	--	--
1,2-Dichloropropane	µg/L	39	--	<0.3	<0.3	--	--	--
1,2-Trans Dichloropropylene	µg/L	10	--	<0.3	<0.3	--	--	--

Table 4

Low Volume Waste Stream Sampling Summary
General NPDES Permit CAG994004
Attachment A Screening Limits

	Units	NPDES General Permit Attachment A	Retention Basin	Plant 2		Tank Farm		Plant 2		Tank Farm	
				Wellpoint System	7:55	Wellpoint System	7:15	Wellpoint System	10:00	Wellpoint System	10:25
	Conc.										
1,3-Dichloropropylene	µg/L	0.5	--	<0.5		<0.5		--		--	
2-Chloroethyl vinyl ether	µg/L	--	--	<2.0		<2.0		--		--	
Acrolein	µg/L	100	--	<12		<12		--		--	
Arylonitrile	µg/L	0.66	--	<10		<10		--		--	
Benzene	µg/L	1	--	<0.3		<0.3		--		--	
Bis (Chloromethyl) Ether	µg/L	--	--	--		--		--		--	
Bromodrom	µg/L	360	--	<0.3		<0.3		--		--	
Bromochloromethane	µg/L	--	--	--		--		--		--	
Bromodichloromethane	µg/L	--	--	--		--		--		--	
Bromomethane	µg/L	--	--	--		--		--		--	
Carbon Tetrachloride	µg/L	0.5	--	<0.3		<0.3		--		--	
Chlorobenzene	µg/L	21000	--	<0.3		<0.3		--		--	
Chlorodibromomethane	µg/L	34	--	<0.4		<0.4		--		--	
Chloroethane	µg/L	100	--	<0.3		<0.3		--		--	
Chloroform	µg/L	100	--	<0.3		<0.3		--		--	
Chloromethane	µg/L	--	--	--		--		--		--	
c-1,2-Dichloroethane	µg/L	--	--	--		--		--		--	
c-1,3-Dichloropropene	µg/L	--	--	--		--		--		--	
Dibromochloromethane	µg/L	46	--	<0.3		<0.3		--		--	
Dichlorobromomethane	µg/L	--	--	<0.4		<0.4		--		--	
Dichlorodifluoromethane	µg/L	--	--	--		--		--		--	
Dichlorotrifluoroethane	µg/L	700	--	<0.2		<0.2		--		--	
Ethylbenzene	µg/L	4000	--	<1.0		<1.0		--		--	
Methyl Bromide	µg/L	3	--	<0.3		<0.3		--		--	
Methyl Chloride	µg/L	1600	--	<0.3		<0.3		--		--	
Methylene Chloride	µg/L	--	--	--		--		--		--	
Methyl-tert-Butyl Ether	µg/L	--	--	--		--		--		--	
Naphthalene	µg/L	--	--	--		--		--		--	
Tetrachloroethane	µg/L	--	--	--		--		--		--	
Trichloroethane	µg/L	--	--	--		--		--		--	
Tetrachloroethylene	µg/L	8.85	--	<0.4		<0.4		--		--	
Toluene	µg/L	150	--	<0.3		<0.3		--		--	
Trichloroethylene	µg/L	5	--	<0.3		<0.3		--		--	
Trichlorofluoromethane	µg/L	--	--	<0.3		<0.3		--		--	
Trichlorotrifluoromethane	µg/L	--	--	--		--		--		--	
1,1,2-Dichloroethane	µg/L	--	--	--		--		--		--	
1,1,3-Dichloropropene	µg/L	--	--	--		--		--		--	
Vinyl Chloride	µg/L	0.5	--	<0.3		<0.3		--		--	
Xylenes	µg/L	--	--	--		--		--		--	
GC/MS FRACTION - ACID COMPOUNDS											
2-Chlorophenol	µg/L	400	--	<3.0		<3.0		--		--	
2,4-Dichlorophenol	µg/L	790	--	<5.0		<5.0		--		--	
2,4-Dimethylphenol	µg/L	2300	--	<5.0		<5.0		--		--	

Table 4

Low Volume Waste Stream Sampling Summary
General NPDES Permit CAG994004
Attachment A Screening Limits

Attachment 11 - Petroleum Products													
	Units	NPDES General Permit Attachment A	Retention Basin	Plant 2		Tank Farm Wellpoint		Plant 2		After Treatment	Tank Farm Wellpoint System		
				System	Wellpoint	System	Wellpoint	System	Wellpoint				
	Conc		07/22/2005 8:10	07/22/2005 7:55	07/22/2005 7:15	07/22/2005 7:15	09/26/2005 10:00	09/26/2005 10:15	09/26/2005 10:25				
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS													
2,4-Dinitrophenol	µg/L	14000	--	<15	<15	<15	--	--	--	--	--		
2,4,6-Trichlorophenol	µg/L	6.5	--	<2.0	<2.0	<2.0	--	--	--	--	--		
2-Nitrophenol	µg/L	--	--	<4.0	<4.0	<4.0	--	--	--	--	--		
4,6-Dinitro-O-cresol	µg/L	765	--	<10	<10	<10	--	--	--	--	--		
4-Nitrophenol	µg/L	--	--	<10	<10	<10	--	--	--	--	--		
P-Chloro-M-Cresol	µg/L	--	--	<2.0	<2.0	<2.0	--	--	--	--	--		
Penta-chlorophenol	µg/L	7.9	--	<10	<10	<10	--	--	--	--	--		
Phenol	µg/L	4600000	--	<2.0	<2.0	<2.0	--	--	--	--	--		
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS													
1,2-Dichlorobenzene	µg/L	600	--	<3.0	<3.0	<3.0	--	--	--	--	--		
1,2-Diphenylhydrazine	µg/L	0.54	--	<2.0	<2.0	<2.0	--	--	--	--	--		
1,2,4-Trichlorobenzene	µg/L	--	--	<5.0	<5.0	<5.0	--	--	--	--	--		
1,3-Dichlorobenzene	µg/L	2600	--	<2.0	<2.0	<2.0	--	--	--	--	--		
1,4-Dichlorobenzene	µg/L	0.5	--	<3.0	<3.0	<3.0	--	--	--	--	--		
2,4-Dinitrotoluene	µg/L	9.1	--	<2.0	<2.0	<2.0	--	--	--	--	--		
2,4,5-Trichlorophenol	µg/L	--	--	--	--	--	--	--	--	--	--		
2,6-Dinitrotoluene	µg/L	--	--	<2.0	<2.0	<2.0	--	--	--	--	--		
2-Chloronaphthalene	µg/L	4300	--	<3.0	<3.0	<3.0	--	--	--	--	--		
2-Methyl-4,6-dinitrophenol	µg/L	--	--	--	--	--	--	--	--	--	--		
2-Methylnaphthalene	µg/L	--	--	--	--	--	--	--	--	--	--		
2-Methylphenol	µg/L	--	--	--	--	--	--	--	--	--	--		
2-Nitroaniline	µg/L	--	--	--	--	--	--	--	--	--	--		
3-Nitroaniline	µg/L	--	--	--	--	--	--	--	--	--	--		
3,3'-Dichlorobenzidine	µg/L	0.077	--	<5.0	<5.0	<5.0	--	--	--	--	--		
3,4-Benzo (b) fluoranthene	µg/L	0.049	--	<5.0	<5.0	<5.0	--	--	--	--	--		
3,4-Methylphenol	µg/L	--	--	--	--	--	--	--	--	--	--		
4-Bromophenyl phenyl ether	µg/L	--	--	<2.0	<2.0	<2.0	--	--	--	--	--		
4-Chloroaniline	µg/L	--	--	--	--	--	--	--	--	--	--		
4-Chlorophenyl phenyl ether	µg/L	--	--	<2.0	<2.0	<2.0	--	--	--	--	--		
4-Chloro-3-Methylphenol	µg/L	--	--	--	--	--	--	--	--	--	--		
4,6-Dinitro-2-Methylphenol	µg/L	--	--	--	--	--	--	--	--	--	--		
Acenaphthene	µg/L	2700	--	<3.0	<3.0	<3.0	--	--	--	--	--		
Acenaphthylene	µg/L	--	--	<2.0	<2.0	<2.0	--	--	--	--	--		
Anthracene	µg/L	10000	--	<10	<10	<10	--	--	--	--	--		
Azobenzene	µg/L	--	--	--	--	--	--	--	--	--	--		
Benztidine	µg/L	0.00054	--	<13	<13	<13	--	--	--	--	--		
Benzo (a) Anthracene	µg/L	0.049	--	<2.0	<2.0	<2.0	--	--	--	--	--		
Benzo (a) Pyrene	µg/L	0.049	--	<2.0	<2.0	<2.0	--	--	--	--	--		
Benzo (e) Pyrene	µg/L	--	--	--	--	--	--	--	--	--	--		
Benzo (g,h,i) Perylene	µg/L	--	--	<2.0	<2.0	<2.0	--	--	--	--	--		
Benz (b) Fluoranthene	µg/L	--	--	--	--	--	--	--	--	--	--		
Benz (k) Fluoranthene	µg/L	0.049	--	<5.0	<5.0	<5.0	--	--	--	--	--		
Benzoic Acid	µg/L	--	--	--	--	--	--	--	--	--	--		

Table 4

Low Volume Waste Stream Sampling Summary
General NPDES Permit CAG994004
Attachment A Screening Limits

NPDES	Units Conc	Retention Basin	Plant 2		Tank Farm		Plant 2		Tank Farm
			Wellpoint System	7-55	Wellpoint System	7-15	Wellpoint System	10-00	Wellpoint System
General Permit Attachment A		07/22/2005 8-10	07/22/2005 7-55	07/22/2005 7-15	07/22/2005 7-15	07/22/2005 7-15	09/26/2005 10-00	09/26/2005 10-15	09/26/2005 10-25
Benzyl Alcohol	µg/L	--	--	--	--	--	--	--	--
Bis (2-Chloroethoxy) methane	µg/L	--	<2.0	<2.0	<2.0	<2.0	--	--	--
Bis(2-Chloroethyl) ether	µg/L	1.4	<3.0	<3.0	<3.0	<3.0	--	--	--
Bis(2-Chloroisopropyl) ether	µg/L	170000	<4.0	<4.0	<4.0	<4.0	--	--	--
Bis(2-Ethylhexyl) phthalate	µg/L	5.9	<4.0	<4.0	<4.0	<4.0	--	--	--
Butyl benzyl phthalate	µg/L	5200	<4.0	<4.0	<4.0	<4.0	--	--	--
Carbazole	µg/L	--	--	--	--	--	--	--	--
Chrysene	µg/L	0.049	<2.0	<2.0	<2.0	<2.0	--	--	--
Dibenzofuran	µg/L	0.049	<5.0	<5.0	<5.0	<5.0	--	--	--
Diethyl phthalate	µg/L	120000	<2.0	<2.0	<2.0	<2.0	--	--	--
Dimethyl phthalate	µg/L	2900000	<2.0	<2.0	<2.0	<2.0	--	--	--
di-n-Butyl phthalate	µg/L	12000	<2.0	<2.0	<2.0	<2.0	--	--	--
di-n-Octyl phthalate	µg/L	--	<4.0	<4.0	<4.0	<4.0	--	--	--
Fluoranthene	µg/L	370	<2.0	<2.0	<2.0	<2.0	--	--	--
Fluorene	µg/L	14000	<2.0	<2.0	<2.0	<2.0	--	--	--
Hexachlorobenzene	µg/L	0.00077	<5.0	<5.0	<5.0	<5.0	--	--	--
Hexachlorobutadiene	µg/L	50	<2.0	<2.0	<2.0	<2.0	--	--	--
Hexachlorocyclopentadiene	µg/L	17000	<6.0	<6.0	<6.0	<6.0	--	--	--
Hexachloroethane	µg/L	8.9	<3.0	<3.0	<3.0	<3.0	--	--	--
Indeno(1,2,3-cd)-pyrene	µg/L	0.049	<2.0	<2.0	<2.0	<2.0	--	--	--
Isophorone	µg/L	600	<3.0	<3.0	<3.0	<3.0	--	--	--
Methoxychlor	µg/L	--	--	--	--	--	--	--	--
Naphthalene	µg/L	--	<3.0	<3.0	<3.0	<3.0	--	--	--
Nitrate Nitrogen	µg/L	--	--	--	--	--	--	--	--
Nitrobenzene	µg/L	1900	<5.0	<5.0	<5.0	<5.0	--	--	--
N-Nitrosodimethyl amine	µg/L	8.1	<7.0	<7.0	<7.0	<7.0	--	--	--
N-Nitroso-di-N-propyl amine	µg/L	1.4	<4.0	<4.0	<4.0	<4.0	--	--	--
N-Nitrosodiphenyl amine	µg/L	16	<2.0	<2.0	<2.0	<2.0	--	--	--
Pentachlorophenol	µg/L	--	--	--	--	--	--	--	--
Phenanthrene	µg/L	--	<2.0	<2.0	<2.0	<2.0	--	--	--
Phenol	µg/L	--	--	--	--	--	--	--	--
Pyrene	µg/L	11000	<3.0	<3.0	<3.0	<3.0	--	--	--
Total Detectable PAHs	µg/L	--	--	--	--	--	--	--	--
GC-MS FRACTION - PESTICIDES									
2,4'-DDD	µg/L	--	--	--	--	--	--	--	--
2,4'-DDE	µg/L	--	--	--	--	--	--	--	--
2,4'-DDT	µg/L	--	--	--	--	--	--	--	--
4,4'-DDD	µg/L	0.00084	--	--	--	--	--	--	--
4,4'-DDE	µg/L	0.00059	--	--	--	--	--	--	--
4,4'-DDT	µg/L	0.00059	--	--	--	--	--	--	--
Aldrin	µg/L	0.00014	--	--	--	--	--	--	--
alpha-BHC	µg/L	0.013	--	--	--	--	--	--	--

Table 4

Low Volume Waste Stream Sampling Summary
General NPDES Permit CAG994004
Attachment A Screening Limits

	Units	NPDES General Permit Attachment A	Retention Basin	Plant 2		Tank Farm Wellpoint System		Plant 2		Tank Farm Wellpoint System	
				Wellpoint System	7:55	07/22/2005	7:15	Wellpoint System	09/26/2005	10:00	After Treatment
Alpha-Endosulfan	µg/L	0.0087	--	--	--	--	--	--	--	--	--
Beta-BHC	µg/L	0.046	--	--	--	--	--	--	--	--	--
Beta-Endosulfan	µg/L	0.0087	--	--	--	--	--	--	--	--	--
Chlordane	µg/L	0.00059	--	--	--	--	--	--	--	--	--
Chlordane alpha	µg/L	---	--	--	--	--	--	--	--	--	--
Chlordane gamma	µg/L	---	--	--	--	--	--	--	--	--	--
delta-BHC	µg/L	---	--	--	--	--	--	--	--	--	--
Dieldrin	µg/L	0.00014	--	--	--	--	--	--	--	--	--
Endosulfan I	µg/L	---	--	--	--	--	--	--	--	--	--
Endosulfan II	µg/L	---	--	--	--	--	--	--	--	--	--
Endosulfan Sulfate	µg/L	240	--	--	--	--	--	--	--	--	--
Endrin	µg/L	0.0023	--	--	--	--	--	--	--	--	--
Endrin Aldehyde	µg/L	0.81	--	--	--	--	--	--	--	--	--
Endrin Ketone	µg/L	---	--	--	--	--	--	--	--	--	--
gamma-BHC	µg/L	0.063	--	--	--	--	--	--	--	--	--
Heptachlor	µg/L	0.00021	--	--	--	--	--	--	--	--	--
Heptachlor Epoxide	µg/L	0.00011	--	--	--	--	--	--	--	--	--
PCB 1016	µg/L	0.00017	--	--	--	--	--	--	--	--	--
PCB 1221	µg/L	0.00017	--	--	--	--	--	--	--	--	--
PCB 1232	µg/L	0.00017	--	--	--	--	--	--	--	--	--
PCB 1242	µg/L	0.00017	--	--	--	--	--	--	--	--	--
PCB 1248	µg/L	0.00017	--	--	--	--	--	--	--	--	--
PCB 1254	µg/L	0.00017	--	--	--	--	--	--	--	--	--
PCB 1260	µg/L	0.00017	--	--	--	--	--	--	--	--	--
Toxaphene	µg/L	0.00075	--	--	--	--	--	--	--	--	--
PERCHLORATE											
Perchlorate	µg/L	---	--	<0.1	--	--	<0.1	--	--	--	--
ASBESTOS FIBERS											
Fibers > or = 0.5 micron	MFL	---	--	<1.1	--	--	<1.1	--	--	--	--
TOTAL PETROLEUM HYDROCARBONS (TPH)											
TPH as Gasoline	µg/L	100	--	<100	--	--	<100	--	--	--	--
TPH as Diesel	µg/L	100	--	420	--	--	670	--	210	--	190
ALCOHOLS											
2-Butanol	µg/L	---	--	<0.1	--	--	<0.1	--	--	--	--
Ethanol	µg/L	---	--	<0.1	--	--	<0.1	--	--	--	--
Isobutanol	µg/L	---	--	<0.1	--	--	<0.1	--	--	--	--
Isopropanol	µg/L	---	--	<0.1	--	--	<0.1	--	--	--	--
Methanol	µg/L	---	--	<0.1	--	--	<0.1	--	--	--	--
n-Butanol	µg/L	---	--	<0.1	--	--	<0.1	--	--	--	--

Table 4

Low Volume Waste Stream Sampling Summary
General NPDES Permit CAG994004
Attachment A Screening Limits
Long Beach Generating Station

POLLUTANT	Units	NPDES General Permit Attachment A	Retention Basin Discharge	Circ. System		Overall	Circ. System	Overall	Retention Basin Discharge
				Intake	001		Intake	001	
	Conc.		09/26/2005 10:30	10/05/2005 9:15	10/03/2005 9:25		10/05/2005 11:25	10/05/2005 11:47	10/05/2005 11:20
Biochemical Oxygen Demand (BOD)	mg/L	—	—	—	—	—	—	—	—
Chemical Oxygen Demand (COD)	mg/L	—	—	—	—	—	—	—	—
Total Organic Carbon (TOC)	mg/L	—	—	—	—	—	—	—	—
Total Suspended Solids (TSS)	mg/L	—	—	—	—	—	—	—	—
Ammonia (as N)	mg/L	—	—	—	—	—	—	—	—
Flow	MGD	—	—	—	—	—	—	—	—
Temperature	°C	—	—	—	—	—	—	—	—
pH	pH unit	—	—	—	—	—	—	—	—
METALS, CYANIDE AND TOTAL PHENOLS									
Antimony, Total	µg/L	4300	—	—	—	—	—	—	—
Arsenic, Total	µg/L	36	—	—	—	—	—	—	—
Beryllium, Total	µg/L	—	—	—	—	—	—	—	—
Cadmium, Total	µg/L	9.4	—	—	—	—	—	—	—
Chromium, Total	µg/L	—	—	—	—	—	—	—	—
Copper, Total	µg/L	3.7	—	—	—	—	—	—	—
Lead, Total	µg/L	8.5	—	—	—	—	—	—	—
Mercury, Total	µg/L	0.051	—	—	—	—	—	—	—
Nickel, Total	µg/L	8.3	—	—	—	—	—	—	—
Selenium, Total	µg/L	71	—	—	—	—	—	—	—
Silver, Total	µg/L	2.2	—	—	—	—	—	—	—
Thallium, Total	µg/L	6.3	—	—	—	—	—	—	—
Vanadium, Total	µg/L	—	—	—	—	—	—	—	—
Zinc, Total	µg/L	86	—	—	—	—	—	—	—
Cyanide, Amenable	µg/L	—	—	—	—	—	—	—	—
Phenols, Total	µg/L	—	—	—	—	—	—	—	—
DIOXIN									
2,3,7,8-TCDD	µg/L	1.3×10^{-8}	—	—	—	—	—	—	—
VOLATILE COMPOUNDS									
1,1-Dichloroethane	µg/L	5	—	—	—	—	—	—	—
1,1-Dichloroethene	µg/L	—	—	—	—	—	—	—	—
1,1-Dichloroethylene	µg/L	3.2	—	—	—	—	—	—	—
1,1,1-Trichloroethane	µg/L	200	—	—	—	—	—	—	—
1,1,1,2-Tetrachloroethane	µg/L	—	—	—	—	—	—	—	—
1,1,2-Trichloroethane	µg/L	42	—	—	—	—	—	—	—
1,1,2,2-Tetrachloroethane	µg/L	1	—	—	—	—	—	—	—
1,2-Dibromoethane	µg/L	—	—	—	—	—	—	—	—
1,2-Dichloroethane	µg/L	99	—	—	—	—	—	—	—
1,2-Dichloropropane	µg/L	39	—	—	—	—	—	—	—
1,2-Trans Dichloroethylene	µg/L	10	—	—	—	—	—	—	—

Table 4

Low Volume Waste Stream Sampling Summary
General NPDES Permit CAG994004
Attachment A Screening Limits

	Units Conc	NPDES General Permit Attachment A	Retention Basin		Circ. System		Outfall		Retention Basin	
			Discharge	Conc	Intake	Conc	001	001	Discharge	Conc
1,3 Dichloropropylene	µg/L	0.5	--	--	--	--	--	--	--	--
2-Chloroethyl vinyl ether	µg/L	---	--	--	--	--	--	--	--	--
Acrolein	µg/L	100	--	--	--	--	--	--	--	--
Acrylonitrile	µg/L	0.66	--	--	--	--	--	--	--	--
Benzene	µg/L	1	--	--	--	--	--	--	--	--
Bis (Chloromethyl) Ether	µg/L	---	--	--	--	--	--	--	--	--
Bromoforn	µg/L	360	--	--	--	--	--	--	--	--
Bromochloromethane	µg/L	---	--	--	--	--	--	--	--	--
Bromodichloromethane	µg/L	---	--	--	--	--	--	--	--	--
Bromomethane	µg/L	---	--	--	--	--	--	--	--	--
Carbon Tetrachloride	µg/L	0.5	--	--	--	--	--	--	--	--
Chlorobenzene	µg/L	21000	--	--	--	--	--	--	--	--
Chlorodibromo-methane	µg/L	34	--	--	--	--	--	--	--	--
Chloroethane	µg/L	100	--	--	--	--	--	--	--	--
Chloroform	µg/L	100	--	--	--	--	--	--	--	--
Chloromethane	µg/L	---	--	--	--	--	--	--	--	--
c-1,2-Dichloroethane	µg/L	---	--	--	--	--	--	--	--	--
c-1,3-Dichloropropene	µg/L	---	--	--	--	--	--	--	--	--
Dibromochloromethane	µg/L	46	--	--	--	--	--	--	--	--
Dichlorobromomethane	µg/L	---	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	µg/L	---	--	--	--	--	--	--	--	--
Dichlorodifluoroethane	µg/L	---	--	--	--	--	--	--	--	--
Ethylbenzene	µg/L	700	--	--	--	--	--	--	--	--
Methyl Bromide	µg/L	4000	--	--	--	--	--	--	--	--
Methyl Chloride	µg/L	3	--	--	--	--	--	--	--	--
Methylene Chloride	µg/L	1600	--	--	--	--	--	--	--	--
Methyl tert-Butyl Ether	µg/L	---	--	--	--	--	--	--	--	--
Naphthalene	µg/L	---	--	--	--	--	--	--	--	--
Tetrachloroethane	µg/L	---	--	--	--	--	--	--	--	--
Trichloroethene	µg/L	---	--	--	--	--	--	--	--	--
Tetrachloroethylene	µg/L	8.85	--	--	--	--	--	--	--	--
Toluene	µg/L	150	--	--	--	--	--	--	--	--
Trichloroethylene	µg/L	5	--	--	--	--	--	--	--	--
Trichlorofluoromethane	µg/L	---	--	--	--	--	--	--	--	--
Trichlorotrifluoromethane	µg/L	---	--	--	--	--	--	--	--	--
t-1,2-Dichloroethane	µg/L	---	--	--	--	--	--	--	--	--
t-1,3-Dichloropropane	µg/L	---	--	--	--	--	--	--	--	--
Vinyl Chloride	µg/L	0.5	--	--	--	--	--	--	--	--
Xylenes	µg/L	---	--	--	--	--	--	--	--	--
GC/MS FRACTION: ACP COMPOUNDS										
2 Chlorophenol	µg/L	400	--	--	--	--	--	--	--	--
2,4 Dichlorophenol	µg/L	790	--	--	--	--	--	--	--	--
2,4 Dimethylphenol	µg/L	2300	--	--	--	--	--	--	--	--

Table 4

Low Volume Waste Stream Sampling Summary
General NPDES Permit CAG994004
Attachment A Screening Limits

	Units	NPDES General Permit Attachment A	Retention Basin		Circ. System		Outfall		Circ. System		Outfall		Retention Basin	
			Discharge	09/26/2005 10:30	Intake	10/05/2005 9:15	001	10/05/2005 9:25	Intake	10/05/2005 11:25	001	10/05/2005 11:47	Discharge	10/05/2005 11:20
			GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS											
2,4-Dinitrophenol	µg/L	14000	--	--	--	--	--	--	--	--	--	--	--	
2,4,6-Trichlorophenol	µg/L	6.5	--	--	--	--	--	--	--	--	--	--	--	
2-Nitrophenol	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
4,6-Dinitro-O-cresol	µg/L	765	--	--	--	--	--	--	--	--	--	--	--	
4-Nitrophenol	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
P-Chloro-M-Cresol	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
Penta-chlorophenol	µg/L	7.9	--	--	--	--	--	--	--	--	--	--	--	
Phenol	µg/L	4600000	--	--	--	--	--	--	--	--	--	--	--	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS														
1,2-Dichlorobenzene	µg/L	600	--	--	--	--	--	--	--	--	--	--	--	
1,2-Diphenylhydrazine	µg/L	0.54	--	--	--	--	--	--	--	--	--	--	--	
1,2,4-Trichlorobenzene	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
1,3-Dichlorobenzene	µg/L	2600	--	--	--	--	--	--	--	--	--	--	--	
1,4-Dichlorobenzene	µg/L	0.5	--	--	--	--	--	--	--	--	--	--	--	
2,4-Dinitrotoluene	µg/L	9.1	--	--	--	--	--	--	--	--	--	--	--	
2,4,5-Trichlorophenol	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
2,6-Dinitrotoluene	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
2-Chloronaphthalene	µg/L	4300	--	--	--	--	--	--	--	--	--	--	--	
2-Methyl-4,6-dinitrophenol	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
2-Methylnaphthalene	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
2-Methylphenol	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
2-Nitroaniline	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
3-Nitroaniline	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
3,3'-Dichlorobenzidine	µg/L	0.077	--	--	--	--	--	--	--	--	--	--	--	
3,4-Benzo (b) fluoranthene	µg/L	0.049	--	--	--	--	--	--	--	--	--	--	--	
3,4-Methylphenol	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
4-Bromophenyl phenyl ether	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
4-Chloroaniline	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
4-Chlorophenyl phenyl ether	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
4-Chloro-3-Methylphenol	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
4,6-Dinitro-2-Methylphenol	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
Acenaphthene	µg/L	2700	--	--	--	--	--	--	--	--	--	--	--	
Acenaphthylene	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
Anthracene	µg/L	10000	--	--	--	--	--	--	--	--	--	--	--	
Azobenzene	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
Benzidine	µg/L	0.00034	--	--	--	--	--	--	--	--	--	--	--	
Benzo (a) Anthracene	µg/L	0.049	--	--	--	--	--	--	--	--	--	--	--	
Benzo (a) Pyrene	µg/L	0.049	--	--	--	--	--	--	--	--	--	--	--	
Benzo (e) Pyrene	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
Benzo (g,h,i) Perylene	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
Benz (b) Fluoranthene	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	
Benzo (k) Fluoranthene	µg/L	0.049	--	--	--	--	--	--	--	--	--	--	--	
Benzoic Acid	µg/L	---	--	--	--	--	--	--	--	--	--	--	--	

Table 4

Low Volume Waste Stream Sampling Summary
General NPDES Permit CAG994004
Attachment A Screening Limits

	Units	NPDES General Permit Attachment A	Retention Basin Discharge	Circ. System	Outfall	Circ. System	Outfall	Retention Basin Discharge
			09/26/2005 10:30	Intake 10/05/2005 9:15	001 10/03/2005 9:25	Intake 10/05/2005 11:25	001 10/05/2005 11:47	10/05/2005 11:20
	Conc							
Benzyl Alcohol	µg/L	—	—	—	—	—	—	—
Bis (2-Chloroethyl) methane	µg/L	—	—	—	—	—	—	—
Bis(2-Chloroethyl) ether	µg/L	1.4	—	—	—	—	—	—
Bis(2-Chloroisopropyl) ether	µg/L	170000	—	—	—	—	—	—
Bis(2-Ethylhexyl) phthalate	µg/L	5.9	—	—	—	—	—	—
Butyl benzyl phthalate	µg/L	5200	—	—	—	—	—	—
Carbazole	µg/L	—	—	—	—	—	—	—
Chrysene	µg/L	0.049	—	—	—	—	—	—
Dibenz(a,h)-anthracene	µg/L	0.049	—	—	—	—	—	—
Dibenzofuran	µg/L	—	—	—	—	—	—	—
Diethyl phthalate	µg/L	120000	—	—	—	—	—	—
Dimethyl phthalate	µg/L	2900000	—	—	—	—	—	—
di-n-Butyl phthalate	µg/L	12000	—	—	—	—	—	—
di-n-Octyl phthalate	µg/L	—	—	—	—	—	—	—
Fluoranthene	µg/L	370	—	—	—	—	—	—
Fluorene	µg/L	14000	—	—	—	—	—	—
Hexachlorobenzene	µg/L	0.00077	—	—	—	—	—	—
Hexachlorobutadiene	µg/L	50	—	—	—	—	—	—
Hexachloro-cyclopentadiene	µg/L	17000	—	—	—	—	—	—
Hexachloroethane	µg/L	8.9	—	—	—	—	—	—
Indeno(1,2,3-cd)-pyrene	µg/L	0.049	—	—	—	—	—	—
Isophorone	µg/L	600	—	—	—	—	—	—
Methoxychlor	µg/L	—	—	—	—	—	—	—
Naphthalene	µg/L	—	—	—	—	—	—	—
Nitrate Nitrogen	µg/L	—	—	—	—	—	—	—
Nitrobenzene	µg/L	1900	—	—	—	—	—	—
N-Nitrosodimethyl amine	µg/L	8.1	—	—	—	—	—	—
N-Nitroso-di-N-propyl amine	µg/L	1.4	—	—	—	—	—	—
N-Nitrosodiphenyl amine	µg/L	16	—	—	—	—	—	—
Pentachlorophenol	µg/L	—	—	—	—	—	—	—
Phenanthrene	µg/L	—	—	—	—	—	—	—
Phenol	µg/L	—	—	—	—	—	—	—
Pyrene	µg/L	11000	—	—	—	—	—	—
Total Detectable PAHs	µg/L	—	—	—	—	—	—	—
GC/MS FRACTION - PESTICIDES								
2,4'-DDD	µg/L	—	—	—	—	—	—	—
2,4'-DDE	µg/L	—	—	—	—	—	—	—
2,4'-DDT	µg/L	—	—	—	—	—	—	—
4,4'-DDD	µg/L	0.00084	—	—	—	—	—	—
4,4'-DDE	µg/L	0.00059	—	—	—	—	—	—
4,4'-DDT	µg/L	0.00059	—	—	—	—	—	—
Aldrin	µg/L	0.00014	—	—	—	—	—	—
alpha-BHC	µg/L	0.013	—	—	—	—	—	—

Table 4

Low Volume Waste Stream Sampling Summary
General NPDES Permit CAG994004
Attachment A Screening Limits

	Units Conc	NPDES General Permit Attachment A	Retention Basin Discharge	Circ. System Intake	Outfall	Circ. System Intake	Outfall	Retention Basin Discharge
			09/26/2005 10:30	10/05/2005 9:15	001 10/03/2005 9:25	10/05/2005 11:25	001 10/05/2005 11:47	10/05/2005 11:20
Alpha-Endosulfan	µg/L	0.0087	--	--	--	--	--	--
Beta-BHC	µg/L	0.046	--	--	--	--	--	--
Beta-Endosulfan	µg/L	0.0087	--	--	--	--	--	--
Chlordane	µg/L	0.00059	--	--	--	--	--	--
Chlordane alpha	µg/L	—	--	--	--	--	--	--
Chlordane gamma	µg/L	—	--	--	--	--	--	--
delta-BHC	µg/L	—	--	--	--	--	--	--
Dieldrin	µg/L	0.00014	--	--	--	--	--	--
Endosulfan I	µg/L	—	--	--	--	--	--	--
Endosulfan II	µg/L	—	--	--	--	--	--	--
Endosulfan Sulfate	µg/L	240	--	--	--	--	--	--
Endrin	µg/L	0.0023	--	--	--	--	--	--
Endrin Aldehyde	µg/L	0.81	--	--	--	--	--	--
Endrin Ketone	µg/L	—	--	--	--	--	--	--
gamma-BHC	µg/L	0.063	--	--	--	--	--	--
Heptachlor	µg/L	0.00021	--	--	--	--	--	--
Heptachlor Epoxide	µg/L	0.00011	--	--	--	--	--	--
PCB 1016	µg/L	0.00017	--	--	--	--	--	--
PCB 1221	µg/L	0.00017	--	--	--	--	--	--
PCB 1232	µg/L	0.00017	--	--	--	--	--	--
PCB 1242	µg/L	0.00017	--	--	--	--	--	--
PCB 1248	µg/L	0.00017	--	--	--	--	--	--
PCB 1254	µg/L	0.00017	--	--	--	--	--	--
PCB 1260	µg/L	0.00017	--	--	--	--	--	--
Toxaphene	µg/L	0.00075	--	--	--	--	--	--
PERCHLORATE								
Perchlorate	µg/L	—	--	--	--	--	--	--
ASBESTOS FIBERS								
Fibers > or = 0.5 micron	MF/L	—	--	--	--	--	--	--
TOTAL PETROLEUM HYDROCARBONS (TPH)								
TPH as Gasoline	µg/L	100	--	--	--	--	--	--
TPH as Diesel	µg/L	100	230	<100	180	140	110	180
ALCOHOLS								
2-Butanol	µg/L	—	--	--	--	--	--	--
Ethanol	µg/L	—	--	--	--	--	--	--
Isobutanol	µg/L	—	--	--	--	--	--	--
Isopropanol	µg/L	—	--	--	--	--	--	--
Methanol	µg/L	—	--	--	--	--	--	--
n-Butanol	µg/L	—	--	--	--	--	--	--